The Effectiveness of Individual Placement and Support for Disability Pensioners in Switzerland

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by

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Preface

The empirical part of this thesis consists of a study protocol, a systematic review and two core studies that are called study 1 and study 2. The data of study 1 rely on the ZhEPP (Zürcher Eingliederungs-Pilot-Projekt) trial. This pilot project was a randomized controlled trial at the Psychiatric Hospital Zurich (PUK) and was funded by the Federal Insurance Office in Switzerland (Bundesamt für Sozialversicherungen; BSV). My special thanks to Chiara Mombelli (BSV), Silvia Joder and Jean-Claude Beer (SVA) for the support during the ZhEPP trial.

Study 2 is based on data that was collected by means of a satisfaction survey. These results were evaluated additionally to the ZhEPP main trial. My special thanks to Hansjörg Leimer and Franziska Bühler for the collection of the data.

Apart from Franziska Bühler I would also like to thank Bettina Bärtsch and my other lovely colleagues at the PUK (i.e. Micheline Huber, Christine Aebersold and all other members from the Supported Employment team) for the support, all the constructive words and your great passion and enthusiasm for the job coaching. Also, I would like to thank my co-workers Sofia Antoniadis, Alexandra Tatalias and Lee Ting Tse, who helped with the data acquisition.

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Further, I would like to thank my supervisor Prof. Dr. med. Wolfram Kawohl for his competent professional support and collegial encouragement. This also applies to Dr. med. Matthias Jäger, Dr. phil. Carlos Nordt and Dr. phil. Ingeborg Warnke. I am very grateful for their mentoring and scientific guidance. Last, I would like to thank Prof. Dr. Hans-Joachim Haug for giving me the opportunity to submit this dissertation to the University of Zurich and for reading and evaluating my thesis.

Abstract

The approach of Individual Placement and Support (IPS), which is based on supported employment (SE), has demonstrated its effectiveness in reintegrating people with mental illnesses back into the competitive employment market. The presented research was initiated in 2011 in response to the existing lack of support for reintegration of disability pensioners suffering from mental illness in Switzerland with the aim to strengthen the knowledge about the IPS approach.

Study 1 aimed to clarify the question, if disability pensioners in Switzerland, whose disability pension has been approved recently, can be reintegrated into the competitive employment market with the support of IPS. The results showed that significantly more IPS users (32%) were reintegrated into the competitive employment market compared to the control group (12%).

Former studies showed that motivation and satisfaction with vocational rehabilitation services are one of the most important factors to the success of the reintegration process. Study 2 elaborated if the IPS offer fits the needs of the persons receiving SE support. In summary, the results showed that social disability pensioners prefer to work in the competitive employment market and that they were satisfied with what IPS provided.

In conclusion, the results of the thesis show that IPS is a promising mechanism to provide vocational support for disability pensioners in Switzerland.

Zusammenfassung

Der Individual Placement and Support (IPS) Ansatz, welches auf dem Konzept von Supported Employment (SE) basiert, konnte seine Effektivität in der Wiedereingliederung von psychisch kranken Menschen in den ersten Arbeitsmarkt unter Beweis stellen. Die vorliegende Studie wurde initiiert, um das Wissen über die Wirksamkeit des IPS-Ansatz zu erweitern.

Studie 1 hatte das Ziel, die Wirksamkeit von IPS bei IV-Neurentnern, die aufgrund einer psychischen Erkrankung die IV-Rente bekommen, zu untersuchen. Die Ergebnisse der Studie 1 zeigen auf, dass signifikant mehr mit IPS unterstützte IV-Neurentner (32%) in den ersten Arbeitsmarkt vermittelt werden konnten, im Gegensatz zu IV-Neurentner (12%), die keine speziellen beruflichen Wiedereingliederungsmassnahmen bekamen. Somit konnte die Annahme, dass IPS hilfreich ist bei der Wiedereingliederung in den ersten Arbeitsmarkt, bestätigt werden.

Da frühere Forschungen gezeigt hatten, dass der Erfolg von SE stark von der Zufriedenheit der Klienten abhängt, wurde Studie 2 elaboriert. Die Ergebnisse der Studie 2 konnten aufzeigen, dass die Probanden, die an IPS Angeboten teilnahmen, zufrieden waren mit dem IPS-Angebot.

Neben diesen beiden Studien beinhaltet diese Dissertation auch eine systematische Übersichtsarbeit und ein Study Protocol.

Abschliessend lässt sich sagen, dass die Ergebnisse dieser Dissertation aufzeigen, dass IPS ein vielversprechendes Instrument ist, um IV-Rentner mit psychischer Erkrankung bei der Wiedereingliederung in den ersten Arbeitsmarkt zu unterstützen.

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1 Introduction

Mental illness can have a profound impact on an individual's quality of life and commonly inflicts drastic changes to a patient's everyday routine. Not just health condition and social life can be affected, but also work status. Several health professionals shy away from reintegrating people with mental illness back into the competitive employment market (Boardman, Grove, Perkins, & Shepherd, 2003). Besides that concern, it became clear in the last decades that work is a crucial part to recovery from serious mental illness (Marrone & Golowka, 1999). This chapter describes the impact of work status on health condition and moreover elaborates on the motivation of the patient to be reintegrated into work with the aid of vocational rehabilitation models. Furthermore, the different vocational rehabilitation models for people with mental illnesses and today's situation of disability pensioners in Switzerland will be explored.

1.1 Impact of work on people with psychiatric disorders

Work is an essential aspect of society. In 1948 Article 23 (1) of the Universal Declaration of Human Rights stated that "everyone has the right to work, to free choice of employment, to just and favorable conditions of work and to protection against unemployment" (United Nations, 1984). Despite this widely accepted right, the unemployment rate amongst people with psychiatric disorders is well above average (Boardman et al., 2003).

Dunn, Wewiorski and Rogers (2008) showed in a qualitative study that work is an important aspect to recovery. Participants of this study stated that they gain more self-esteem as their effort gets appreciated by the employer and they feel that their work is relevant for the company. The useful activities at work lead to an improved quality of life (Salyers, Becker, Drake, Torrey, & Wyzik, 2004). Work is considered as a stabilizing factor for the psyche and contributes to routine and structure in daily life (Shepard, 1989).

In many societies, being employed is valued as an important factor for the development of one's social identity, personal growth and meaning of life (Warner 1994; Boardman et al., 2003). Unemployment prevents people from feeling like a contributing member of society and is particularly harmful among young people. If adolescents fail to enter the labor market, they are likely to struggle to find their place in the society and to define their social role in the work environment (Rinaldi et al., 2010). Work, particularly in the competitive employment market, is strongly associated with financial independence (Dunn et al., 2008) that is crucial for the maintenance of the familiar social status (Kawohl & Lauber, 2013). Moreover, Nordt, Warnke, Seifritz, and Kawohl (2015) showed that during

the economic turndown in 2008 the risk of suicide increased by 20-30% when persons became unemployed.

Besides the financial and self-determination factors, work prevents individuals with psychiatric disorders from social isolation (Boardman et al., 2003). Through communication and interaction with colleagues they are active in life and the risk of chronification of psychiatric illnesses is reduced (Prince, Harwood, Blizard, Thomas, & Mann, 1997). Considering these positive results it is not surprising that 90% of people with psychiatric disorders state that they want to find back to work (Grove, 1999), most of them in the competitive employment market (Secker, Grove, & Seebohm, 2001). The motivation of unemployed individuals with psychiatric disorders who struggle to find back into work and the positive effects of work lead to the assumption that reintegration into the employment market is an essential factor for recovery (Dunn et al., 2008).

1.2 Impact of motivation and satisfaction on work rehabilitation models

Motivation is considered as a major driving force of behavior and psychological processes and is hence classified as the most important factor in vocational rehabilitation (Medalia & Saperstein, 2011). Motivation is a necessary condition for individuals with mental illness to take action to recovery. Several studies showed that motivation leads to higher reintegration rate (e.g. Heslin et al., 2011; Areberg, Björkman, & Bejerholm, 2013). Motivation and satisfaction are part of a cyclical mechanism of vocational rehabilitation: if someone has the motivation to sign into vocational rehabilitation and succeeds in maintaining his goal (e.g. obtaining a job) than the person will be satisfied with the vocational services. This satisfaction raises the motivation and promotes the achievement of future objectives (Locke & Latham, 1990).

Catty et al. (2008) assume that unsatisfactory life circumstances can have an impact on motivation as people dissatisfied with their life circumstances had more motivation to change them. Furthermore, a motivated behavior of people with mental illnesses has a positive impact on the motivation of the job coach (Catty et al., 2011) leading to a more engaged coaching and a higher satisfaction on the part of the client (Areberg et al., 2013). However, current research about the satisfaction of clients with the various vocational services, but especially supported employment (SE), is almost non-existing.

1.3 Development of work rehabilitation models

If people lose their job due to mental illness various vocational rehabilitation models can be implemented. The two best-known models have different philosophies.

1.3.1 Pre-vocational rehabilitation

Pre-vocational rehabilitation (PVR) has a long tradition (Rumrill & Koch, 2015) and its philosophy is in a nutshell "first train, then place". This implies that individuals get trained first, with the objective to find work in the competitive employment market. These approaches are commonly mentioned as stepwise, gradual processes and are well implemented in most German-speaking areas (Lehman & Steinwachs, 1998; Hoffmann, 2013). There are some different types of PVR that can be clustered in trainings and workshops. To give an impression of the different trainings, the two most frequently mentioned trainings are illustrated in more detail in the following.

- **Social skills trainings** take place in a rehabilitation setting and contain role playing, psychoeducational treatment and situation-related behavioral intervention (Bell, Lysaker, & Bryson, 2003). These approaches are considered to be important according to Elkins and Elkins (2001) who estimated that social skills deficits are responsible for 90% of job loss among individuals with psychiatric disorders.
- In **vocational training programs** people learn to structure their days and to figure out what they want. This training includes the preparation for a job interview, the development in job-seeking skills, but also the identification of personal strengths which are important for daily work (Rumrill & Koch, 2015). This training is lengthy, preventing people from finding a job in the competitive employment market rapidly (McGurk & Mueser, 2014).

To give an impression of the diversity of workshops, the two most frequently mentioned within PVR are described in detail.

- The **Clubhouse model and transitional employment** is one of the oldest workshop types and involves three steps. In the first step, individuals with severe mental illness are involved in running the clubhouse. If a person gets accustomed to the work in the clubhouse, they are transferred to jobs in the community that are limited in their duration (3 to 6 months). After finishing a transitional job in the community, the individuals with psychiatric disorders move either to another job in the community or search for an employment in the competitive employment market (Beard, Probst, & Malmud, 1982).
- **Sheltered workshops** offer protected working conditions such as low-stress work environments and sufficient support from the supervisor. Most of the workspaces are offered by

companies that are specialized in employing people with mental illnesses. Sheltered workplaces are rarely integrated into the community. Instead, these placements are arranged in independent companies hampering the integration into society. As the diversity of the jobs is limited, the job preferences of the people cannot always be taken into account. The workshops provide structure, but pay very low wages (Whitehead, 1979).

In general, the advantage of PVR is that they give structure and daily routine (McGurk & Mueser, 2014). The disadvantage is that most people are not able to make the transition to a job in the competitive employment market (Bond, 1992) as the skills acquired do not sufficiently equip the participants with the skills needed. Furthermore, the increased work load and the stress linked with the competitive employment market that the sheltered workplaces consciously aim to avoid, can be overwhelming for people with psychiatric disorders new in the job. Additionally, as most PVRs are time limited, the support stops when people with psychiatric disorders obtain a job in the competitive employment market (Twamley, Narvaez, Becker, Bartels, & Jeste, 2008).

1.3.2 Supported Employment

The approach of SE works according to the principle of "first place, then train" and was developed in the United States during the 1980s (Bond, Drake, Mueser, & Becker, 1997). The principle of SE implies integration into the competitive employment market in the first place without preparatory training but with sufficient support from a job coach in the context of the actual workplace. The job coach supports during the time of the application process, but also while the client is already working.

Becker and Drake (1993) defined a structured SE approach for people with severe mental illness (SMI). This approach is called Individual Placement and Support (IPS) and is considered the best-defined approach of SE. IPS is based on eight principles (Drake, Bond, & Becker, 2012) that are summarized in the following section:

a) **Focus on clients' job preferences**: Most people with mental illnesses have a clear vision of the job they are seeking. Some people appreciate the close cooperation with co-workers while others prefer a calm working atmosphere with no disruption. The job coach supports the clients to define realistic goals regarding their future employment and elaborates personal weaknesses and strengths. Based on this coaching, the clients elaborate what they aspire as their next job.

b) **Placement into competitive work:** The basic idea of IPS is to reintegrate people with mental illness back into the competitive employment market. The criteria to be eligible for IPS are to be in working

age and to have the genuine desire to work in the competitive employment market. There is no restriction regarding diagnose.

c) **Welfare benefit counselling:** People receiving a pension due to mental illness are often insecure about the rights and opportunities that are offered by the health care system. One of the important duties of the job coach is to be aware of the different opportunities and support the individuals so that they are able to make purposeful decisions on how to achieve their employment goals.

d) **Work closely with other care systems:** The job coach maintains contact with other people in the individuals` care system, such as doctors or social workers. The different parties keep each other mutually informed on a regular basis, especially if there are changes in the health condition or the performance of the individual. Based on the cooperation of different occupational groups a safety net for the individual is formed.

e) **Rapid job search:** Immediate job search is one of the most important principles of IPS (McGurk & Mueser, 2014). After the elaboration of realistic job preferences, strengths and weaknesses, the job-seeking begins. The job coach supports the individuals in handling online job platforms and motivates them to seek for job vacancies in the newspaper. Because IPS is an individualized model, the job coach and the client elaborate which coaching frequency works best to achieve the clients` goal.

f) **Individualized support:** As IPS is based on individual support, the job coach has no defined standards for the treatment of the clients. Instead, the coaching is based on the biography and work history of the client. This is essential as every individual attains individual work experiences in different working environments.

g) **Time-unlimited follow-on support:** IPS operates according to the principle of time-unlimited coaching, i.e. the coaching lasts until the individual decides to stop the support. The clients are supported during the application process, but also during their employment. The clients are free to choose the coaching frequency.

h) **The job coach needs to build up a network:** The job coaches are constrained to contact companies that are potentially interested in hiring clients of the job coaches. Based on this acquisitions, the job coaches build up a network of companies.

In addition to these eight principles, an important guideline of IPS is that each job coach supports no more than 25 people with mental illnesses. In conclusion, IPS is most effective if a high fidelity of the principle is given (Bond et al., 2001a; Bond, McHugo, Becker, Rapp, & Whitley, 2008; Waghorn, 2009).

In the past years, studies showed that SE leads to improved competitive employment rates compared to PVR (Bond, Drake, & Becker, 2008; Bond, Campbell, & Drake, 2012). The effectiveness of the IPS approach is well studied within the context of the US labour market. Bond, Drake, & Becker (2008) showed in 11 randomized controlled trials (RCT) that the average employment rate among people with SMI was 61% for people subjected to SE compared to 23% for people assigned to PVR. Individuals of the SE groups worked more hours per week and had longer average job durations. Additionally, the placement of IPS participants into the competitive employment market occurred almost 10 weeks earlier than for people with mental illness supported by other vocational rehabilitations (Bond et al., 2012).

After Bond and Drake (2014) showed that SE is effective in reintegrating people with mental illness back into the competitive employment market in the US, the question arose if this positive result can be replicated in Europe. However, Europe has a much different health care system and different terms of employment. The most important implementation of SE in Europe, EQOLISE (Enhancing the Quality of Life and Independence of Persons Disabled by Severe Mental Illness through Supported Employment), was established in 2003 in six centres across Europe (i.e. London, Ulm, Sofia, Zurich, Rimini, Groningen). In this study, the participants were trained by job coaches according to IPS principles. The results showed that participants assigned to the IPS group were employed more often into the competitive employment market as compared to the control group. In addition, the IPS participants dropped out less often from the study and the rates of hospitalization were lower. Moreover, EQOLISE showed that the approach of IPS leads to a better state of mental health (e.g. lower anxiety and depression) and a more successful integration into the competitive employment market compared to people in sheltered workplaces who did not attain a comparable stabilization (Burns et al., 2007). In conclusion, the Europe-wide study showed that IPS is an effective rehabilitation model not only for the US, but also for Europe, including Switzerland. These results were supported by Hoffman et al. (2014) who showed in a 5-year longitudinal study that IPS is effective in Switzerland. Importantly, the development of SE not only led to higher employment rates among people with mental illnesses, but it also met their desire to work in the competitive employment market (Bond & Drake, 2014; Killackey, Jackson, & McGorry, 2008). Based on these results, the German S3 guidelines on psychosocial therapies recommend using SE as vocational rehabilitation for people with mental illness (DGPPN, 2013; Brieger & Hoffmann, 2012).

1.4 Vocational rehabilitation for disability pensioners in Switzerland

In Switzerland, people suffering from a physical or mental illness preventing them from working receive a financial support (so-called IV-pension) from the social services SVA (Sozialversicherungsanstalt, Eng.: social benefits centre, so-called IV-institution) if they fulfill certain conditions (i.e. incapacity to work for at least a year at a degree of 40%). If a person is considered fully incapacitated to work he will receive a full pension. If a person is still able to work part-time he will receive a partial pension. Up to the year 2010, the IV-institution has registered a continuous increase of people receiving a disability pension due to mental illness compared to other disability pensions (e.g. disability pension due to physical impairment). While in the year 2000, around 77 000 people fulfilled the criteria for a disability pension due to mental illness in Switzerland, the amount for such pensions had increased to 102 000 by 2011 (IV-Statistik BSV, 2013). While this amount of IV-pensioners remained nearly constant since 2010, other disability pensions decreased.

According to the 5th IV-revision law, that was valid until the end of 2011, the IV-institution offered various support of reintegration into the competitive employment market (e.g. vocational training, intervention of apprenticeship) before a person was approved as a disability pensioner (5. IV-Revision, 2006). However, after receiving the approval for a pension, auxiliary measures to support the reintegration into the employment market were limited. Solely after the routine IV-pension revision, taking place periodically for each of the disability pensioners, sporadic assistance was provided.

The 6th IV-revision law was entered to become effective on 1st of January 2012 (6. IV-Revision, 2012). This law includes two substantial modifications for reintegration of pensioners suffering from a psychiatric disability. The first modification is named “Beratung & Begleitung” (Eng.: advice & support) and includes advice and support for reintegration after a pension was reduced or annulled. This modification aims to retain part-time pensioners in the employment market. The second modification, “Arbeitsversuch” (Eng.: job trial), gives the pensioners the opportunity to be reintegrated into a company for a maximum of six month. The company offers the pensioners the opportunity to demonstrate their abilities while still receiving their pension without any reductions. The company has no financial risk as they don’t have to pay salaries to the pensioners. On the other hand, the company does not receive any remuneration from the IV-institution. After six months, there is no guarantee that the job trial can be transformed into a permanent position. These two modifications are very important, but still not sufficient. So far, no SE standard services were implemented yet in any of the IV-revision laws.

1.5 Aim of the thesis

People with mental illness state that they want to work in the competitive employment market (Bond & Drake, 2014), also because having a sheltered workplace is associated with possible stigmatization.

Following the upcoming success of supported employment during the 1980s in the United States, a Europe-wide SE (EQOLISE) study was established in 2003, which is until now the most important implementation of SE in Europe. The Psychiatric Hospital of the University of Zurich (PUK) was one of six centres in Europe that offered Supported Employment to persons with psychiatric disorders. This study showed, that participants supported through IPS in Europe were significantly more often reintegrated into the competitive employment market compared to participants who were assigned to the control group (see Chapter 1.3.2). Based on these positive results, the PUK decided to establish a supported employment department as a standard service in 2005. The results obtained in Zurich during the EQOLISE study and the experience gained in the supported employment department at the PUK led to the notion that the IPS approach could be effective in reintegrating disability pensioners in Switzerland into the competitive employment market. As the 5th IV-revision, in place while the project was initiated, did not provide sufficient support for disability pensioners to obtain work in the competitive employment market (5. IV-Revision, 2006; see details in Chapter 1.4) and due to the scarcity of scientific studies focusing on supported employment in Switzerland, Prof. Dr. med. Wolfram Kawohl, with the aid of lic. phil. Bettina Bärtsch, designed and initiated the Zurich reintegration pilot-project (Zürcher Eingliederungs-Pilot-Projekt; ZhEPP) at the PUK in January 2011.

The ZhEPP was launched with the aim to assess if disability pensioners benefit from the SE approach IPS. One of the fundamental convictions of ZhEPP is to reintegrate disability pensioners as quickly as possible into the competitive employment market after their pension approval to prevent social exclusion, risk of chronification. Following this, the main objective of this thesis is to assess the effectiveness of the IPS approach for disability pensioners who receive the pension for no longer than a year at the start of the monitoring. This objective is elaborated in study 1 (Chapter 4.3).

Regarding the empirical part for study 1, the first step was to compose a study protocol (Chapter 4.1) in order to determine the hypotheses. While working on the study protocol, it became apparent that there is almost no existing research that addresses the issue of potential predictors to enhance the success of SE (apart from a few studies that reported predictors that can enhance the success of working rehabilitation in genera (Matschnig, Frottier, Seyringer, & Frühwald, 2008). Former studies

showed that SE is more effective than PVR in reintegrating persons with psychiatric disorders into the competitive employment market, but the specific advantages of SE remained elusive. Hence, we decided to report a systematic review (Chapter 4.2) with the focus of different predictors that enhance the success of SE. The results of this systematic review showed that satisfaction with the vocational support and motivation to work are the most important predictors for the success of SE. These results inspired me to analyze unpublished data from a Master thesis written at the PUK that focused on assessing the satisfaction of the participants receiving SE services at the PUK. Consequently, this thesis additionally aims to assess if people supported by SE in ZhEPP are satisfied with the SE services at the PUK. This objective is elaborated in study 2 (Chapter 4.4).

In conclusion, the conducted studies in this thesis should give a broader understanding of the effectiveness of IPS in Switzerland. Further, they should contribute to the discussion if the paradigm shift from the traditional rehabilitation models and its "first train, then place"-philosophy towards the SE philosophy "first place, then train" is reasonable.

The thesis is structured as follows. In Chapter 2, the aims of the study protocol, the systematic review, and the empirical studies are elaborated in more detail, including the scientific contribution of each (co-)author. Chapter 3 provides information on the methods used. Chapter 4 consists of the empirical part with emphasis on the study protocol that is related to study 1, a systematic review on factors impacting the success of SE, and the two core studies. The thesis ends with a general discussion (Chapter 5) and the conclusions (Chapter 6).

2 Aims of the individual studies

2.1 Aim of the study protocol

The study protocol entitled „The effectiveness of individual placement and support for people with mental illness new on social benefits: a study protocol" (Chapter 4.1) elaborates the hypothesis of study 1 that assesses the effectiveness of SE. Further, it includes the research demand, the procedure of randomization and the analysis plan of study 1 that focuses on the ZhEPP project. It is strongly based on the study approval that was handed in to the BSV (Bundesamt für Sozialversicherungen, Eng.: federal social insurance office, Switzerland). The study protocol is registered under trial number ISRCTN54951166 and was published in *BMC Psychiatry* in 2013.

Scientific contribution to the study protocol

Wolfram Kawohl (WK) and Bettina Bärtsch (BB) were responsible for the conception of the project. WK and BB submitted the first study proposal to the BSV to receive a funding for this study. Sandra Viering (SV) registered this project at the *ISRCTNregistry* site and was the primary responsible for the draft and the writing of the manuscript and processed the contributions of all other co-authors. Furthermore, SV was responsible for the submission and revision of the manuscript. Nicolas Rüsch (NR) contributed to the finalization of the manuscript, with special focus on 'stigmatization'. Caitriona Obermann (CA), Wulf Rössler (WR) and WK were responsible for the proofreading.

2.2 Aim of the systematic review

The second subchapter (Chapter 4.2) of the empirical part is a systematic review about predictors that are influencing the success of SE. It is entitled "Welche Faktoren beeinflussen den Erfolg von Supported Employment? – Eine systematische Übersicht" (Eng.: "Which factors influence the success of Supported Employment? – A systematic review"). Losing employment due to mental illness has a high impact on the individuals. Some reviews aimed to identify particular predictors that can enhance the outcome of the two work rehabilitation models PVR and SE (e.g. Matschnig et al., 2008; Tsang, Leung, Chung, Bell, & Cheung, 2010), but the studies do not clearly differentiate between the predictors of the two models. As on the one hand SE was shown to be a highly effective approach in earlier studies (Burns et al., 2007), and on the other hand SE is also the rehabilitation model used in the ZhEPP project, this paper aims to identify predictors that can improve the success rate of SE. The focus was on SE, but PVR was drawn upon for comparison. This paper was published in the German-language peer-reviewed journal *Psychiatrische Praxi*s in 2015.

Scientific contribution to the systematic review

SV and WK were responsible for the idea of the manuscript. SV was responsible for the design and the literature search for the manuscript. Furthermore, SV was responsible for the drafting, the submission and the revision of the manuscript. Matthias Jäger (MJ) and WK supported the development process of the manuscript and did proofreading.

2.3 Aim of study 1

Although SE produces better employment outcomes and is more cost effective than PVR (Knapp et al., 2013), it is not well implemented in European health care systems. This also applies to Switzerland. In order to reduce unemployment among people with mental illness who are able and willing to work, they must be reached at an early stage and adequate support, such as IPS, must be applied to be reintegrated successfully into competitive employment market. Consequently, study 1 (Chapter 4.3), entitled "Supported employment for the reintegration of pensioners with mental illnesses: a

randomised controlled trial", aims to investigate if pensioners new on social benefits in Switzerland, supported according to the principles of IPS, have a higher (re)integration rate into the competitive employment market compared to the control group. In addition, working hours and month, and job tenure were investigated. This paper is accepted in the peer-reviewed *Frontiers of Public Mental Health.*

Scientific contribution to study 1

WK and BB designed the study. SV was responsible for the recruitment of the participants, the interviews every six month and the data acquisition in general (regarding data of the participants as well as data of the job coaches). SV was responsible for the analysis of the questionnaires that formed a crucial part for the primary outcome of this study. SV was responsible for the statistical analysis of the data, including the standard analysis (e.g. Kolmogorov-Smirnov-test, Mann-Whitney-U-test, Chi-Square-test), but also a generalized estimating equation model (GEE) to test for group differences regarding the primary outcome that is advantageous for the analysis of repeated measurements of categorical outcome variables. Carlos Nordt (CN) and Ingeborg Warnke (IW) contributed to the statistical evaluation. WR, IW, MJ and WK revised the final manuscript. SV was responsible for drafting, the writing, the submission and the revision of the final manuscript.

2.4 Aim of study 2

Almost all former studies on IPS focus primarily on the question if IPS produces better employment outcomes than traditional vocational rehabilitation or sheltered workplaces in general. Furthermore, former research focused on the quality of life and the psychopathology of IPS users and classical vocational rehabilitation, while few research has been done on clients' satisfaction. However, clearly more research needs to be done to investigate if IPS fits the different needs of different groups, such as people who are unemployed and want to work in the competitive employment market or employees who have problems with their current job situation. Chapter 4.4, entitled "Does Ìndividual Placement and support` satisfy the users need?" was written to contribute to fill this research gap. This paper was published in the peer-reviewed *Frontiers of Public Mental Health* in 2015.

Scientific contribution to study 2

Based on the former studies that motivation is one of the most important predictor for the success of treatments and is cyclical with satisfaction, SV had the idea to analyze the data, that were collected by Hansjörg Leimer (HL) for his Master thesis at the Fachhochschule Nordwestschweiz (FHNW) in the first place (supervised by Peter Sommerfeld (PS)). HL collected the data regarding the satisfaction level of clients receiving SE services at the PUK during that time. He did that under the supervision of Franziska Bühler (FB) and Wolfram Kawohl (WK). Due to the lack of time, the data has never been

analyzed. As these data included solely IPS participants of SE services at the PUK, they can well contribute to the broader understanding of IPS in Switzerland. Hence, SV had the idea for the manuscript, and was the primary responsible for the statistical analyses, the writing, the submission and the revision of the final manuscript. CN contributed to the statistical analyses. All co-author contributed to the final manuscript by revising the first draft.

3 Methods and materials

The following chapter includes the description of the used questionnaires regarding the two core studies. There is no information provided regarding the study protocol and the systematic review as those papers are purely descriptive.

3.1 The ZhEPP-trial

All analyses conducted in the context of study 1 utilized data from the ZhEPP study. This study was a RCT with an intervention group that received coaching according to the principle of IPS for two years and a control group that received no specific vocational support. The ZhEPP study included 250 people in total, whereby 127 participants were assigned to the intervention group and 123 persons were assigned to the control group. After being assigned to one of the groups, all participants were monitored every six month (baseline, 6, 12, 18, 24) for two years. The primary outcome of this study was to investigate if IV-pensioners who receive a pension due to mental illness can be reintegrated back into the competitive employment market with the support of the IPS approach.

A wide range of questionnaires was compiled which allows to investigate more than just the primary outcome. This data can be used in future research. All questionnaires conducted are described in detail in the study protocol in Chapter 4.1.

Materials of the ZhEPP-trial

The data for the ZhEPP study was collected through questionnaires. To investigate the primary outcome and some secondary outcomes subject to study 1 (hours and month worked, job tenure), five questionnaires were conducted throughout the study period with each of the participants.

To collect baseline data, the German version of the client sociodemographic and service recipient inventory (CSSRI-EU) was administered (Chisholm, 2000). This questionnaire includes items regarding socio-demographic information, living situation, income, utilizations about care, and medication.

To measure the working status of the participants their job status was evaluated every six month. This questionnaire was implemented in the study EQOLISE in 2007 (Burns et al., 2007). The interviewers were asked for job and position as well as starting date of the job and how the placement for this job was achieved (i.e. found by participant himself or with help by psychologist, job coach or other people). Job coaches recorded the job status whenever the participant's job situation changed. In contrast, the job status of the people in the control group was recorded in each of the interviews.
The Lancashire Quality of Life Profile (LQoLP) is based on Lehman`s Quality of Life Interview (Lehmann, 1983). The German version of this survey was developed by Priebe (1995). 20 Items were rated from 1−7, ranging from 1 = "strongly dissatisfied" to 7 = "strongly satisfied" (Cronbach's alpha=.78). Additionally, the LQoLP contained 32 questions concerning work, religion and safety in society. These items have dichotomic answering options (yes/no). This questionnaire has been used to assess individuals' working hours.

The Indiana Job Satisfaction Scale (IJSS, Resnick & Bond, 2001) was conducted to measure the satisfaction among employees working in the competitive employment market, regarding colleagues and the working atmosphere at the new employment. It is a 32-item scale with rating scores from 1 ("not satisfied") to 4 ("highly satisfied") (Cronbach`s alpha=.86). Additionally, the questionnaire contained questions about monthly income and job duration.

The IPS fidelity scale was recorded by the job coaches every three months. This scale evaluates the compliance of the service to the IPS principles as described above (Bond et al., 2001a). Job coaches rated 15 items with scores between 1 and 5. High fidelity of the approach is obtained if the job coaches reached a score between 66 and 76, sufficient fidelity is given with scores from 56 to 66, and insufficient fidelity is given with scores less than 55.

3.2 The Satisfaction-trial

Regarding study 2, all analyses were based on a survey aimed to investigate the satisfaction with the SE among SE users at the PUK. People participating in the satisfaction-trial consist out of three subsamples. In detail, the participants are from two different RCTs that took place at the PUK, i.e. Zurich Program for Sustainable Development of Mental Health Services (ZInEP) and ZhEPP, and the users of SE standard services of PUK (IPS-PUK). In total, the sample consists out of 125 participants (ZInEP= 13, ZhEPP=53, IPS-PUK=59). This questionnaire was conducted only once with each of the participants.

Materials of the satisfaction-trial

Client satisfaction with IPS was evaluated using a questionnaire based on the ZüPaZ ("Zürcher Fragebogen zur Patientenzufriedenheit"; Eng.: Zurich questionnaire of patients' satisfaction) (Modestin, Hanselmann, Rüesch, Grünwald, & Meyer, 2003) and the ZUF-8 ("Zufriedenheitsfragebogen"; Eng.: satisfaction questionnaire) (Schmidt, Lamprecht, & Wittmann, 1989). Eight items from the ZüPaZ were selected and modified according to the designated application (e.g. "job coach" instead of "doctor"). Both scales include items rated on a Likert scale ranging from 1 to 4, with higher scores indicating higher satisfaction with SE services. The entire ZUF-8 was included without any modifications. The items range from 1 to 4 with higher scores indicating higher satisfaction. Furthermore, a modified version of the "Lebensführungssystem" (life leading system) (Sommerfeld, Hollenstein, & Calzaferri, 2011) involving the usefulness of IPS was included in the questionnaire. Here, the clients were asked to select the three items which fit their needs best. The scale includes 11 dichotomous items. The symptomatology of the clients over the past four weeks was assessed with the German version of the Symptom Check List SCL-10 (Franke, 2002), a short version of the SCL-90. Here, the items range from 0 ("no suffering") to 4 ("suffered very strong"). Questions address symptoms of interpersonal sensitivity, depression, anxiety, phobic anxiety, and psychoticism.

4 Empirical part

4.1 Study protocol

The effectiveness of individual placement and support for people with mental illness new on social benefits: a study protocol

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Abstract

Background

In Switzerland, people with a severe mental illness and unable to work receive disability benefits ('IV-pension'). Once they are granted these benefits, the chances to regain competitive employment are usually small. However, previous studies have shown that individual placement and support (IPS) supports a successful reintegration into competitive employment. This study focuses on the integration of newly appointed IV-pensioners, who have received an IV-pension for less than a year.

Method/design

The present pilot project ZHEPP (Zürcher Eingliederungs-Pilot Projekt; engl.: Zurich integration pilot project) is a randomized controlled trial (RCT). The 250 participants will be randomized to either the intervention or the control group. The intervention group receives support of a job coach according to the approach of IPS. Participants in the control group do not receive IPS support. Participation takes a total of two years for each participant. Each group is interviewed every six months (T_0-T_4). A two-factor analysis of variance will be conducted with the two factors *group* (intervention versus control group) and *outcome* (employment yes/no). The main criterion of the two-factor analysis will be the number of competitive employment contracts in each group.

Discussion

This study will focus on the impact of IPS on new IV-pensioners and aims to identify predictors for a successful integration. Furthermore, we will examine the effect of IPS on stigma variables and recovery orientation.

Trial register

ISRCTN54951166

Background

In general only 10 to 20% of people who suffer from severe mental illness are employed in the competitive employment market (McGurk, Muser, & Pascaris, 2005). However, most people suffering from a severe mental illness would actually like to work in the competitive employment market (Bond, 2004). As persons with mental illness often perceived as unreliable employees by potential employers, the reintegration can be very difficult (Scheid, 2005). Additionally, health professionals frequently discourage patients from applying for competitive employment, because they are convinced that a stressful surrounding will lead to a destabilization of the patient (Drake et al., 1999; Rinaldi et al., 2008).

In Switzerland, people suffering from a physical or mental illness which prevents them from working receive a financial support (so called IV-pension) from the social services SVA Zurich (Sozialversicherungsanstalt Zürich, Eng.: social benefits centre of Zurich, so called IV-institution). Over the past 12 years the IV-institution has registered a continual increase of people receiving an IV-pension because of mental illness. In the year 2000 around 77 000 people received this contribution in Switzerland but by 2011 the amount of IV-pensioners had increased to 102 000.

Before receiving the IV-pension, the IV-institution offers several possibilities of supporting a reintegration into the competitive employment market (e.g. vocational training, intervention of apprenticeship). However, after receiving the approval for an IV-pension auxiliary measures to support a reintegration are limited. In consequence IV-pensioners may not feel sufficiently supported by the IV-insurance. During our information gatherings many IV-pensioners stated that the only thing they knew about the IV-insurance was that it provided assistance in finding sheltered work.

Most mentally ill people including IV-pensioners state that they are not keen to work in such places and would rather be integrated into competitive employment (Drake et al., 1999). They feared that working in a sheltered work place will lead to a high risk of having to stay in this environment (Bond, 1998).

Furthermore, patients state that the integration into the competitive employment market leads to more self-esteem and an increased quality of life (Drake, McHugo, Becker, Anthony, & Clark, 1996) due to receiving a salary as well as the chance of finding more social contacts (Bell, Lysaker, & Milstein, 1996). Mentioning working in a sheltered employment also means revealing one's illness and hence a fear of not being accepted in society (Bond et al., 2001b).

The stigma associated with psychiatric disorders can have a major negative impact on individuals with mental illness. Stigma comes in two forms (Rüsch, Angermeyer, & Corrigan, 2005). First, members of the general public, for example employers, can endorse negative stereotypes about people with mental illness and discriminate against them, e.g. not inviting persons with mental illness for job interviews. This is referred to as public stigma. Second, self-stigma occurs if people with mental illness agree with those negative stereotypes and turn them against themselves, undermining their self-esteem, self-efficacy and motivation to pursue life goals such as employment (Corrigan, Larson, & Rüsch, 2009). People with mental illness can also suffer from stigma as a stressor if they perceive stigma as a potential harm that exceeds their coping resources (Rüsch et al., 2009a; Rüsch et al., 2009b).

There are two main reasons to examine stigma variables in the context of IPS (Corrigan, Powell, & Rüsch, 2012): (i) fear of public stigma as well as self-stigma may stop people from seeking competitive employment, therefore increased levels of stigma variables could predict less positive IPS outcomes; (ii) re-entering the workforce and the associated social roles and contacts might lead to an increased perception of social inclusion among people with mental illness, resulting in less self-stigma, perceived public stigma as well as stigma-related stress; therefore stigma variables can be assessed as secondary outcomes of IPS.

The traditional approach in rehabilitating people with mental illness has been *first train*, *then place* (Matschnig et al., 2008). In this approach possible difficult situations concerning the employment are trained beforehand. After training these situations the person is placed in competitive employment. Practicing the various scenarios which could occur in the future employment is useful, but the situations in real life are generally much tougher than expected and differ from the trained situations. In many cases the job was chosen for the client, and not by the client, and was thus not suited to the client`s needs and preferences (McGurk et al., 2005). *First train*, *then place* has drawbacks, as people become ill and are not able to hold their jobs for a long time (Twamley et al., 2008). In consequence many of the people treated by this approach are only able to work in a sheltered workplace (Bond & McDonel, 1991).

As frontline services to integrate IV-pensioners into the competitive employment market are almost non-existent, two problems emerge: Firstly, IV-pensioners often lack the knowledge of the legal framework and are unsure about their rights. Erroneously, they commonly believe that they are not allowed to apply for a job in the competitive employment market while receiving an IV-pension. The

IV-insurance is addressing this issue by providing more information to their pensioners. Secondly, pensioners grow accustomed to not working, thereby increasing the risk of further chronification. To minimize such risks this study includes only new IV-pensioners who have received an IV-pension for less than one year.

During the 1980s the concept of supported employment (SE) was developed in the USA (Bond et al., 1997) as a reaction to the inefficient *first train*, *then place*-models (Burns et al., 2007). SE includes intensive job-search assistance for people with mental illness. Particular attention is given to the clients' preferences and skills, to assist successful integration into the competitive employment market and to support them while working in competitive employment market (Campbell, Bond, & Drake, 2011). In the USA this approach has been proven to be very successful (Cook, Leff, & Blyler, 2005). However, a transfer of these methods to Europe requires certain structural changes, as Europe differs from the USA concerning job market and welfare system. In 2007 EQOLISE (Enhancing the Quality of Life and Independence of Persons Disabled by Severe Mental Illness through Supported Employment, (Burns et al., 2007)) was established. In this study, the first of its kind in Europe, participants were trained by job coaches according to the supported employment approach of Individual Placement and Support (IPS) (Becker & Drake, 1993). This study was implemented in six centers across Europe. The results showed that participants assigned to the IPS group were employed more often into competitive employment as compared to the control group. In addition, the IPS participants dropped out of the study less often, and the rates of hospitalization were lower.

Moreover, EQOLISE demonstrated that working in a sheltered work place did not lead to a comparable stabilization of the affected persons (Burns et al., 2007). A better state of mental health (e.g. lower anxiety and depression) and a more successful integration into the competitive employment market through the approach of IPS was evident (Bond, Drake, & Becker, 2012).

The supported employment concept IPS, which was used in the EQOLISE study as well as in the study presented here, ensures the immediate support of a job coach and the direct integration into competitive employment. Job coaches support the client by searching for vacant jobs, assisting applications, as well as coaching the client in working situations (Burns et al., 2009). If the client and employer approve, job coaches may also support the employer and the workmates.

Research need

The EQOLISE study was able to prove that the positive effects for the participants assigned to the IPS group are comparable to findings in the US. However, previous studies did not differentiate between participants with different characteristics and thus no conclusions for subgroups of clients such as persons with new-onset disability benefits can be drawn. After receiving an IV-pension the risk of further chronification of a mental illness increases over time, hence making a successful reintegration into the competitive employment market increasingly difficult.

This study is a randomized controlled trial (RCT) and will investigate the effectiveness of SE for IV-pensioners receiving the IV-pension for less than a year.

Research question

The main aim of this study is:

(1) To determine if job coaching according to the IPS approach leads to a more successful integration of new IV-pensioners into competitive employment.

In addition, the following issues will be analyzed:

(2) Possible enhancement of quality of life, state of mental health and level of self-esteem by finding competitive employment

(3) Chances of maintaining an employment and increasing the workload, if the participant desires this and has the ability

(4) Cost-benefit equation of job coaching and potential saving schemes as compared to the current handling

(5) Predictors for a successful coaching after receiving an IV-pension

(6) The effect of IPS on stigma variables (perceived public stigma, self-stigma, stigma stress) and recovery orientation

(7) Stigma variables and recovery orientation as predictors of finding competitive employment during IPS

Methods/design

Time scale

To determine interest in participating in the pilot study ZHEPP, the project has been divided into two phases. The first phase was implemented to ascertain whether enough IV-pensioners were interested in participating in this study. The first phase involved the recruitment of 40 participants and those assigned to the intervention group involved in job coaching. The number of participants was easily reached and the first phase was successfully completed by the summer of 2011. The second phase

was then initiated. A further 210 participants had to be recruited to reach the final sample size of 250. This recruitment took place until September 2012. After being assigned to the control or intervention group the participants will be followed up over the next two years. Hence the total duration of the study will be three years and nine months (January 2011 until end of September 2014).

Recruitment and design

Persons who recently received the approval of the IV-pension were invited to an information event. The aim was to inform about the project as well as the supported employment concept IPS. Additionally the job coaches were introduced to the potential participants.

Those interested in participating in our study had the possibility to register and were invited to an one-on-one dialog for further information. Persons who subsequently wished to participate in the study signed the informed consent and were randomized to one of the two groups (control group or the intervention group). During the following two years the participants will be interviewed every six months concerning their well-being, self-esteem, stigma and recovery variables as well as job status (T_0-T_4) (List of instruments see Table 1).

Table 1 Overview questionnaire based instruments

Instrument	Variable	Perspective	Measurement point				
			T0	T1	T2	T3	T4
Anreizfokus-skala	Motivation of participant	P	√	√	√	√	√
Client Sociodemographic and Service Receipt Inventory	Sociodemographic facts; medical supply	P/R	√	√	√	√	√
Lacanshire Quality of Life Profile	Quality of Life	P/R	√	√	√	√	√
Symptom checklist 90	Psychological symptoms	P/R	√	√	√	√	√
Rosenberg self esteem scale	Self-esteem	P/R	√	√	√	√	√
Groningen Social Disability Scale	Social role; social disability	P/R	√	√	√	√	√
Global Assessment of Social Disability Scale	Overall psychological disturbance	R	√	√	√	√	√
Internalizes Stigma of Mental Illness Scale	Stigma coping; social drawback	P	√		√		√
Cognitive appraisal	Cognitive appraisal Stigmatization as stressor	P	√		√		√
Perceived Devaluation-Discrimination Questionnaire	Experienced Stigmatization	P	√		√		√
Recovery Assessment Scale	How they feel about themselves and their life	P	√		√		√
Centre für Epidemiological Studies Depression Scale	Depressive symptoms	P	√		√		√
Job discrimination	Experienced discrimination at working place	P	√		√		√
Client Job Status	Working situation	P/JC	√	√	√	√	√
Job Preferences	Job preferences	P/JC	√				
Indiana Job Satisfaction/ Termination Scale	Job satisfaction beginning, while and at the end	P/JC	√	√	√	√	√

Note: P: participant, R: Researcher, P/R: Patient by communicating with researcher, P/JC: Patient by communication with job coach; Measurement point: compiled every six month (T0, T1, T2, T3, T4).

The ZHEPP project is a randomized control trial (RCT) with two factors, *group* (intervention versus control group) and *outcome* (employment yes/no).

The participants of the intervention group are supported by a job coach according to the approach of IPS. Those randomized to the control group are not subject to any intervention by our job coaches, but are merely invited to an interview every six months. The catchment area is the canton of Zurich, Switzerland.

Sample size

The target study population consists of 250 IV-pensioners, who recently (not longer than a year) received the approval of the IV. In total, 126 persons were assigned to the intervention group, where they receive the coaching according to the IPS approach. The other 124 were assigned to the control group.

The sample size was calculated through power analysis. A medium effect size (0.42 SD) should be detected with a power of 95% at a two tailed significance level of 0.05.
Ideally, participants assigned to the intervention group can find employment in the competitive employment market and may subsequently become independent of social benefits subsequently.

Inclusion and exclusion criteria

Inclusion criteria:

- IV-pension due to a mental disorder (full or part time pension)
- The participant does not receive the IV-pension for longer than a year
- The IV-pensioner`s goal is to work in the competitive employment market
- Ability to give written informed consent
- Working age (18–60)

Exclusion criteria:

- Organic mental disorder (Diagnosed to ICD-10: F0)
- Mental retardation (Diagnosed to ICD-10: F7)

Interview based instruments and data collection

Based on the EQOLISE study the following instruments (German version) are used to quantify the outcome of the general well-being of the IV-pensioners. The participants are interviewed every 6 months by research workers (T_0-T_4).

(1) Incentive Focus Scale (IF): assessment of the participant`s motivation (Rheinberg, 1989)
(2) Client Sociodemographic and Service Receipt Inventory (CSSRI- EU): assessment of sociodemographic facts and the medical supply (Chisholm, 2000; Roick et al., 2001)
(3) Lancashire Quality of Life Profile (LQoLP): assessment of the participant`s quality of live (Oliver, Huxley, Priebe, & Kaiser, 1997)
(4) Symptom-Checklist 90-Revised (SCL-90-R): assessment of the participant`s psychological symptoms (Derogatis, 1997)
(5) Rosenberg self-esteem scale (RSES): assessment of the participant`s self-esteem (Rosenberg, 1965)
(6) Groningen Social Disability Scale (GSDS-II): assessment of social disabilities, fulfil their social role as expected (Wiersma, 1988)
(7) Global Assessment of Functioning (GAF): brief assessment of social, occupational and psychological functioning of the participant (Wiersma, DeJong, & Ormel, 1998)
(8) Recovery Assessment Scale (RAS), 24-item short version: assessment of participant`s feeling towards him/herself and his/her life (Hall, 1995)
(9) Center for Epidemiological Studies Depression Scale (CES-D) , German 15-item version: assessment of depressive symptoms (Corrigan, Salzer, Ralph, Sangster, & Keck, 2004)

This study will also assess stigma and recovery variables, using the following validated self-report measures administered once a year (T_0, T_2 and T_4):

(1) Internalized Stigma of Mental Illness Scale (ISMI), 29 items (Schein & Koenig, 1997)
(2) Cognitive appraisal of stigma as a stressor, 8 items (Rüsch et al., 2009a; Rüsch et al., 2009b)
(3) Perceived Devaluation-Discrimination Questionnaire (PDDQ), 12 items, measuring perceived public stigma (Ritsher, Otilingam, & Grajales, 2003)

Additionally, for those who worked at least one day in the last year:
Experienced discrimination at work, 5 items (Rüsch et al., unpublished). Furthermore, job preferences as well as the participant`s expectation concerning the process of finding an employment will be evaluated in the first interview ($T_0$). Every six months ($T_0$-$T_4$) the current situation of employment and, if applicable, the participant`s satisfaction with his/her employment are assessed.

(1) Client Job Status: statement of the ongoing working situation of the participant
(2) Job Preferences: assessment of the participant`s job preferences

(3) Indiana Job-Satisfaction/Termination Scale (IJSS/IJTS): assessment of the participant`s satisfaction with his/her employment at the beginning, while having a job and if applicable after termination of her/his contract of employment

Moreover, job coaches are required to complete the IPS-Fidelity scale (Link, 1987) every three months to ensure that the standards of the IPS concept are fulfilled.

Plan of analysis

This study aims to determine, whether job coaching according to IPS enables the successful integration of IV-pensioners into competitive employment.

The total N of this study is 250 participants. Through a Bernoulli randomization the participants are assigned to either the control or the intervention group.

The intervention's effectiveness is tested by interview based instruments (in total 16 questionnaires). Binary, nominal and interval-scaled data are collected.

A two-factor analysis of variance with the two factors *group* (intervention versus control group) and *outcome* (employment yes/no) will be conducted to control the effectiveness of the intervention. The main criterion of the two-factor analysis will be the quantity of jobs received.

As parameters vary on more than one level a simultaneous comparison in a multilevel model is carried out.

Moreover, the study contains two group comparisons. The persistence of being employed or not in both groups is examined with help of a Cox-regression.

A significance level < 0.05, thus, a confidence interval of 95% is to be achieved.

Ethics

The study was approved by the ethics committee of the canton of Zurich (KEK) und the reference number KEK-ZH-NR: 2010-0311/0. Research is carried out in compliance with the Declaration of Helsinki of the World Medical Association (WMA).

Discussion

Whilst there has been research about specific age groups (Twamley et al., 2008), the effect of IPS on several other groups (e.g. new recipients of disability benefits) so far has not been demonstrated. Therefore, this study will focus on the impact of IPS on newly appointed IV-pensioners. Another aim will be to identify predictors for the coaching success in IPS and the relationship between self-stigma and coaching success.

ZHEPP is a randomized controlled trial (RCT). The participants of the study are randomized to either the control group or the intervention group. We hypothesize that job coaching according to IPS will lead to a more successful integration of new IV-pensioners into competitive employment. If our hypothesis is supported, IPS may in the future be offered to new Swiss IV-pensioners on a routine basis.

4.2 Systematic review

Which factors influence the success of Supported Employment?

Welche Faktoren beeinflussen den Erfolg von Supported Employment? – Eine systematische Übersicht

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Zusammenfassung

Anliegen: Identifikation prädiktiver Faktoren für den Erfolg von Supported Employment (SE) und pre-vocational training (PVT) bei Menschen mit psychischen Erkrankungen.

Methode: Systematische Literatursuche in PsychInfo, PubMed, PsychIndex, und PsyArticles.
Ergebnisse: 45 Artikel konnten eingeschlossen werden. Motivation, Arbeitserfahrung und das Einhalten der SE-Prinzipien konnten als wichtigste Prädiktoren identifiziert werden.

Schlussfolgerung: Es zeigt sich, dass unter Berücksichtigung der einzelnen Prädiktoren der Erfolg von SE weiter gesteigert werden kann.

Schlüsselwörter: Supported Employment, berufliche Wiedereingliederung, pre-vocational training, Prädiktor, psychische Erkrankung

Abstract

Objectives: Main goal of this review is to identify predictive factors for the outcome of Individual Placement and Support (IPS) with a focus on Supported Employment (SE) and of pre-vocational training (PVT) of individuals with mental illness.

Method: A systematic search of PsychInfo, PubMed, PsychIndex and PsyArticles was conducted. Studies were included if they compared both approaches, SE and PVT, contained predictors to optimize SE or PVT, investigated the effectiveness of SE or examined what constitutes adequate job coaching.

Results: 52 articles have been included. 27 articles referred to predictors that influence the outcome of SE or PVT, 9 showed a direct comparison between both approaches, 5 investigated job coaching and 4 examined the effectiveness of SE. In summary motivation, satisfaction and high fidelity of IPS criteria seem to be the most important predictors for a successful job reintegration using SE.

Discussion: Overall, SE is more effective than PVT. The success of SE can be enhanced by keeping the predictors in mind. However, future research should focus more specifically on predictors.

Keywords:

Supported employment, vocational rehabilitation, predictor, mental illness, pre-vocational training

Einleitung

Psychische Erkrankungen haben für die Betroffenen neben den körperlichen und psychischen meist auch schwerwiegende soziale Folgen (Tschopp et al., 2011). Aufgrund einer psychischen Erkrankung verlieren viele Betroffene ihre Arbeit (Twamley et al., 2012). Durch die Arbeitslosigkeit fühlen sich die Erkrankten häufig aus der Gesellschaft ausgeschlossen, ihnen fehlt in vielen Fällen die Tagesstruktur, die durch eine Arbeit gegeben ist, und auch die sozialen Kontakte nehmen ab (Burns et al., 2009). Hinzu kommt die finanzielle Sorge, die durch den ausfallenden Lohn entsteht. Zudem ist belegt, dass sich eine geregelte Arbeitstätigkeit stabilisierend auf die psychische Gesundheit auswirkt (Berger, Schneller, & Maier, 2012) und es konnte gezeigt werden, dass Arbeitslosigkeit die psychische Gesundheit negativ beeinflusst, da, unter anderem, die Sinnstiftung und der Sozialstatus darunter leiden (Kawohl & Lauber, 2013).

Vor diesem Hintergrund stellt sich die Frage, wie man erwerbslose Menschen mit psychischer Erkrankung wieder in den Arbeitsalltag integrieren kann (Brieger & Hoffmann, 2012). Viele Betroffene geben an, dass sie gerne wieder arbeiten würden (Catty et al., 2008). Zahlreiche Publikationen konnten zudem die Annahme unterstützen, dass Arbeit zu einer erhöhten Lebensqualität und mehr Selbstbewusstsein bei den Betroffenen führt (Drake et al., 1999; McGurk et al., 2009).

Zur Integration von Menschen mit einer psychischen Erkrankung in den Arbeitsmarkt stehen grundsätzlich zwei Ansätze zur Verfügung. Pre-vocational training (PVT) verfolgt den Ansatz „zuerst trainieren, dann platzieren“. Bei diesem Ansatz werden Klienten meist im geschützten Rahmen zuerst auf spezielle Arbeitssituationen vorbereitet und erst dann an eine Arbeitsstelle vermittelt (Corrigan, Larson, & Kuwabara, 2007). Viele der Betroffenen geben an, dass sie eine Arbeitsstelle in der freien Wirtschaft präferieren würden (Killackey et al., 2008). Jedoch zeigte sich, selbst wenn die Klienten durch PVT eine Stelle im ersten Arbeitsmarkt erreichten, dass die fehlende weitere Unterstützung schnell zu einer Überforderung aller Beteiligten und somit auch zu einem schnelleren Stellenverlust führte (Hoffmann, 2013).

In den letzten zwei Jahrzehnten wurde eine neue Form der Arbeitsrehabilitation entwickelt. Dieser neue Ansatz, der unter dem Namen Supported Employment (SE) bekannt wurde, beinhaltet, dass man die Betroffenen mit Hilfe eines Job Coaches zuerst in eine Arbeitsstelle in der freien Wirtschaft vermittelt. Im Anschluss werden sie durch diesen Job Coach unterstützt und „trainiert“ („individual placement and support“, IPS) (Becker & Drake, 1993). Dieses „Training“ ist zeitlich nicht begrenzt. Dies bedeutet, dass der Job Coach so lange Unterstützung bietet, wie der Klient es sich wünscht,

auch bei einem Stellenwechsel. Burns et al. (2007) konnten in der Studie EQOLISE (Enhancing the Quality of Life and Independence of Persons Disabled by Severe Mental Illness through Supported Employment) aufzeigen, dass Menschen, die Unterstützung durch SE erhalten, auch weniger hospitalisiert wurden und falls sie hospitalisiert wurden, waren die Aufenthalte kürzer als die der PVT Kontrollgruppe.Weiter zeigte sich, dass bei den Probanden, die durch SE unterstützt wurden, im Gegensatz zur PVT Kontrollgruppe eine Verbesserung der psychopathologischen Symptome zu verzeichnen war.

Eine weitere Studie konnte zudem aufzeigen, dass das Coaching nach SE weitergeführt werden muss, wenn die Probanden bereits eine Arbeitsstelle gefunden haben (Jäger et al., 2013). Ohne diese weiterführende Unterstützung wird die Nachhaltigkeit durch SE beeinträchtigt.

SE, insbesondere IPS, welches das bis heute am gründlichsten untersuchte SE Modell (Fig. 1, Becker & Drake, 1993) ist, leistet einen wichtigen Beitrag in der heutigen Arbeitsvermittlung (Campbell et al., 2010; Bond et al., 2012). Dies ist vor allem durch den hohen Vermittlungserfolg von SE gegenüber PVT, aber auch durch die bessere subjektive Bewertung der Teilnehmenden (z.B. Lebensqualität, Selbstwertgefühl) begründet.

Diese, in den letzten Jahren festgestellte, positive Entwicklung (v.a. bezogen auf den europäischen Markt) (Kinoshita et al., 2013; Bauer, 2013; Wancata, 2013) von SE führte zu der Empfehlung No.12 der S3-Leitlinie Psychosoziale Therapien (DGPPN), Menschen mit einer psychischen Erkrankung, die eine Arbeit auf dem ersten Arbeitsmarkt anstreben, durch SE Angebote zu unterstützten (DGPPN, 2012).

Um den Erfolg von SE noch zu steigern, bedarf es der Berücksichtigung prädiktiver Faktoren. Zu diesem Thema liegen bereits Übersichtsartikel vor (Anthony & Jansen, 1984;, Tsang et al., 2010). Da hier jedoch keine deutliche Abgrenzung zwischen SE und PVT vorgenommen wurde, erscheint eine differenziertere Überprüfung sinnvoll.

Der Hauptfokus der vorliegenden Arbeit liegt daher auf der Erfassung prädiktiver Faktoren, die zu einer erfolgreichen Arbeitsvermittlung durch SE/ IPS sowie durch PVT führen. Vor dem Hintergrund einer systematischen Literaturrecherche werden Faktoren, die eine erfolgreiche Arbeitsvermittlung kennzeichnen sowie Unterschiede bezüglich dieser Faktoren zwischen SE und PVT diskutiert.

Methode

Vier Literaturdatenbanken („PubMed“, „PsychInfo“, „PsychIndex“ und „PsyArticles“) wurden durchsucht. Die folgenden Ergebnisse beziehen sich auf die Summe der gefundenen Ergebnisse

in den Literaturdatenbanken. Es wurde keine Zeitbegrenzung gesetzt. Es wurden zuerst Suchbegriffe bezüglich SE eingegeben.

Der alleinstehende Suchbegriff „supported employment“ ergab insgesamt 4762 Treffer. „Supported employment“ kombiniert mit „mental illness“ ergab noch 1251 Artikel. Kombinierte man die Begriffe „supported employment“ und „mental illness“ mit dem Suchbegriff „predictor“, reduzierte sich die Zahl der Artikel auf 371. Danach wurde die gleiche Suche bezogen auf Arbeitsrehabilitation im Allgemeinen durchgeführt. Der Begriff „work rehabilitation“ führte zu insgesamt 45 827 Artikeln. Dieser Begriff stellte sich als sehr ungenau heraus, da hierzu auch Arbeitsrehabilitation bei körperlichen Behinderungen gehörte. Die Kombination „work rehabilitation“ und „mental illness“ ergab noch 7281 Artikel. Präzisierte man diese Anfrage noch durch den Suchbegriff „predictor“ fanden sich noch 293 Artikel.

Zusätzlich wurde eine Suche mit dem Begriff „vocational rehabilitation“ durchgeführt, die insgesamt zu 24 090 Ergebnissen führte. Kombinierte man nun „vocational rehabilitation“ und „mental illness“, wurden insgesamt noch 4864 Artikel in den Datenbanken gefunden. Fügte man den Suchbegriff „predictor“ hinzu, führt das insgesamt noch zu 125 Artikeln.

Zusätzlich wurde der Begriff „pre-vocational training“ in den oben genannten Literaturdatenbanken durchsucht. Dies führte zu insgesamt 11 102 Ergebnissen. Konkretisierte man diesen Begriff weiter mit „mental illness“ fand man nur noch 103 Artikel. Mit dem zusätzlichen Suchbegriff „predictor“ reduzierte sich die Auswahl an Artikeln auf 1. Die Kombination der beiden Massnahmen „supported employment“ und „pre-vocational training“ ergab das Ergebnis von 14 Artikeln.

Ein- und Ausschlusskriterien

Sowohl die 371 SE Artikel als auch die die 294 Artikel über allgemeine Arbeitsrehabilitation und die 14 Artikel die aus der Kombination beider Begriffe zusammenkamen, wurden in einem zweiten Schritt anhand des Titels selektiert. Hierbei wurden noch weitere 157 Artikel ausgeschlossen. Im nächsten Schritt wurde die Zusammenfassung eines jeden Artikels gesichtet und die relevanten Artikel ausgewählt. Eingeschlossen wurden Artikel, die die Effektivität von SE untersuchten, die Prädiktoren zur Optimierung von SE oder PVT behandelten, die die Eigenschaften der Job Coaches genauer untersuchten, oder die einen Vergleich zwischen den beiden Ansätzen (PVT und SE) zum Inhalt hatten. Es konnten 52 Artikel eingeschlossen werden.
Ausgeschlossen wurden Artikel, die nicht in englischer oder deutscher Sprache verfasst waren und die prädiktive Faktoren von SE bezüglich Menschen mit körperlichen Behinderungen bzw. mit Lernschwierigkeiten zum Thema hatten.

Ergebnisse

Bei den 52 Artikeln, die den Einschlusskriterien entsprachen, handelte es sich um 23 randomisierte kontrollierte Studien, 13 Übersichtsartikel, darunter eine Metaanalyse, 6 Querschnitts-, 5 Längsschnittstudien und 3 qualitative Studien. Hinzu kommt eine deskriptive, ethnographische Studie, in der die Job Coaches beobachtet und durch eine Codierung bewertet werden und eine katamnestische Untersuchung.

Struktur

Die Ergebnisse wurden zuerst in 4 Kategorien unterteilt: Patientenbezogene Faktoren, behandlungsbezogene Faktoren, arbeitsbezogene Faktoren, angebotsspezifische Faktoren bei SE. Diese Kategorien wurden dann noch einmal durch entsprechende Faktoren verdeutlicht.

Patientenbezogene Faktoren

1. Klinische Faktoren

1.1. Diagnose

Campbell et al. (2010) konnten aufzeigen, dass unabhängig von der Diagnose des Klienten SE erfolgreicher ist als PVT. In der PVT Gruppe wurde deutlich, dass je weniger ausgeprägt die Erkrankung war, desto einfacher ließen sich die Menschen in den ersten Arbeitsmarkt vermitteln (Campbell et al., 2010). Es konnte gezeigt werden, dass SE insbesondere für Patienten mit einer psychischen Störung wie einer Schizophrenie (Twamley et al., 2012) oder einer Erstpsychose (Baksheev et al., 2012) geeignet ist (Tab. 1).

Bei einem Vergleich zwischen dem Erfolg beider Ansätze bei affektiven Störungen zeichnet sich die Überlegenheit von SE nicht mehr so deutlich ab. Jedoch zeigt sich, dass Menschen, die sich selbst als schwer beeinträchtigt beschreiben und/oder drogenabhängig sind, das SE Angebot seltener in Anspruch nehmen (Biegel et al., 2009). Gleichzeitig wird der Zusammenhang der Diagnose einer Schizophrenie mit dem Vermittlungserfolg durch SE kontrovers diskutiert. Es existiert eine Reihe von Hinweisen darauf, dass es generell schwierig ist, Menschen mit einer Schizophrenie wieder in den ersten Arbeitsmarkt zu vermitteln. Dies wird in Zusammenhang gebracht mit kognitiven Defiziten (Medalia & Choi, 2009) sowie Negativsymptomatik (Rosenheck et al., 2006). Bezogen auf SE liegen jedoch auch positive Ergebnisse vor. So konnten Killackey et al. (2008) aufzeigen, dass SE vor allem bei jungen Menschen mit einer ersten Psychose wirkungsvoll ist, die in einem medizinischen Zentrum für die Früherkennung und Intervention von Erstpsychosen in Behandlung waren. Hier konnte

der Vermittlungserfolg gegenüber PVT beinahe um das Dreifache gesteigert werden. Auch Twamley et al. (2012) konnten in einer Studie darlegen, dass der

Vermittlungserfolg von Menschen, die an Schizophrenie erkrankt sind, größer ist, wenn sie ein SE Angebot wahrnahmen.

1.2. Medikamente

Hinsichtlich der Dosierung bzw. der Einnahme von Medikamenten gibt es keine Hinweise auf einen Einfluss auf den Erfolg von SE oder PVT (Twamley et al., 2008).

2. Soziodemografische Faktoren

2.1. Alter

Bezüglich des Faktors Alter war kein Einfluss auf das Ergebnis von PVT nachweisbar (Tab. 2) Baksheev et al., 2012). Hinsichtlich SE konnten Burke-Miller et al. (2012) in ihrer Studie aufzeigen, dass der Faktor Alter hier eine entscheidende Rolle in der Vermittlung spielt. So konnte für die unter 30jährigen ein signifikant höherer Vermittlungserfolg im Gegensatz zu den über 30jährigen nachgewiesen werden. Die Ergebnisse sind jedoch inkonsistent. Eine andere Studie ergab, dass ältere Erwachsene, die an Schizophrenie erkrankt waren, dank SE genauso gut vermittelt werden konnten wie jüngere Erwachsene (Twamley et al., 2012). Andere Gruppen unterstützen die Annahme, dass Alter nicht als Prädiktor für den Erfolg von SE herangezogen werden kann (Campbell et al., 2011; Baksheev et al., 2012).

2.2. Geschlecht

Es bestehen Hinweise, dass der Faktor Geschlecht keinen signifikanten Einfluss auf den Vermittlungserfolg von SE oder PVT hat (Campbell et al., 2011). Catty et al. (2011) konnten aber zeigen, dass SE einen größeren Erfolg zu verzeichnen hat, wenn das Geschlecht des Job Coaches mit dem Geschlecht des Klienten übereinstimmt.

2.3. Zivilstand

Es konnte gezeigt werden, dass der Zivilstand des Klienten bei SE keinen Einfluss auf den Erfolg des Angebotes hat (Gold et al., 2006; Drake et al., 2013).

Behandlungsbezogene Faktoren

3. Trainingsfaktoren

3.1 Kognitives Training

Es konnten aufgezeigt werden, dass kognitive Defizite zu einer erschwerten Arbeitsrehabilitation führen (McGurk et al., 2005). Es bestehen Hinweise darauf, dass dieser Befund sowohl auf PVT als auch auf SE zutrifft (Tab. 3).

Konsens besteht in der Annahme, dass im ersten Schritt vor allem die Aufmerksamkeits- (Kurtz, 2011) und Gedächtnisleitungen (Medalia & Choi, 2009) bei psychisch erkrankten Menschen durch kognitives Training gestärkt werden sollten, um eine verbesserte Eingliederung in den Arbeitsmarkt durch SE und PVT zu erreichen (Vauth et al., 2005; Tsang et al., 2010).

Einige Autoren stimmen in der Aussage überein, dass die Kombination aus kognitivem Training und SE zu einer noch erhöhten Wiedereingliederungsrate von psychisch erkrankten Menschen führt als SE allein (McGurk et al., 2005; Medalia & Choi, 2009; McGurk et al., 2007; Wexler & Bell, 2005).

3.2. Andere Tranings

Es zeigte sich, dass Menschen mit höheren sozialen Kompetenzen auch bessere Anstellungsquoten bzw. Anstellungsbedingungen erreichten (Catty et al., 2008; Gühne et al., 2012). Bezogen auf die PVTs zeigt sich, dass Menschen, die eine Kombination aus PVT und Sozialem Kompetenz-Training erhielten, eine deutlich verbesserte Eingliederungsrate vorweisen konnte, besonders wenn die Unterstützung noch weitergeführt wurde (Tsang, 2011). Es zeigte sich auch, dass an Schizophrenie erkrankte Menschen, die ein Arbeitstraining erhielten, bevor sie wieder in den Arbeitsmarkt integriert werden sollten, besser vermittelt werden konnten (Tsang & Pearson, 2001).

Wallace und Tauber (Wallace & Taubler, 2004) konnten aufzeigen, dass Klienten, die mit einem Training („workplace fundamentals program“), welches das Einschätzen der Stressoren am Arbeitsplatz und Problemlösestrategien beinhaltet, zusätzlich zum SE Teilnahmen, weniger Stellenfluktuation aufwiesen und zufriedener mit ihrer Anstellung waren. Hinsichtlich Verdienst oder geleisteten Arbeitsstunden konnten jedoch im Vergleich zu der Gruppe, die nur SE erhalten hatte, keine Unterschiede festgestellt werden.

Mueser et al. (2005) konnten keine Hinweise darauf finden, dass der Erfolg von SE durch eine Kombination mit einem weiteren Training (dies beinhaltete sowohl arbeitsbezogene Faktoren als auch soziale Kompetenzen) gesteigert werden kann.

3.3. ACT-IPS

Gold et al. (2006) stellten fest, dass die Einführung eines Zusatzteams zur Koordination der Zusammenarbeit zwischen verschiedenen Fachkräften (Case Management) in ländlichen Gegenden mit geringem Jobangebot zu einer erfolgreicheren Vermittlung gegenüber herkömmlichem SE führte.

Arbeitsbezogene Faktoren

4. Arbeitsfaktoren

4.1. Arbeitserfahrungen

Frühere Arbeitserfahrung erwies sich in einigen Studien als wichtiger Prädiktor für den Vermittlungserfolg einer arbeitsrehabilitativen Intervention (SE und PVT) (Catty et al., 2008; Campbell et al., 2010; Tsang & Pearson, 2001). Es existieren Hinweise, dass bei SE vor allem durch früher erworbene Arbeitserfahrungen die Arbeitsbereitschaft und die Motivation der Klienten gesteigert wird (Campbell et al., 2010). So konnten Biegel et al. (2009) in ihrer Studie aufzeigen, dass vor allem Menschen mit früheren Arbeitserfahrungen das SE Angebot wahrnehmen. Cobière et al. (2009) fanden zudem, dass Klienten mit Arbeitserfahrung ein höheres Selbstwertgefühl aufwiesen (Tab. 4).

4.2. Ausbildungsniveau

Das Ausbildungsniveau der Klienten hatte konsistent in allen Studien keinen Einfluss auf den Erfolg von SE und PVT (Frounfelker et al., 2011; Campbell et al., 2011; Twamley et al., 2012).

4.3. Erfolgserwartungen zu Beginn des Job Coaching

Nach Reker und Eikelmann (1998) hat die Erfolgserwartung eines Patienten zu Beginn der Arbeitstherapie einen prädiktiven Wert für den tatsächlichen Erfolg. Dies lässt darauf schließen, dass auch die Erfolgserwartung des Klienten vor einem Job Coaching einen Einfluss auf den Wiedereingliederungserfolg bei SE hat. Die Erwartungen sollten realistisch und ernsthaft erscheinen, um zu einer erfolgreichen Vermittlung zu führen (Tschopp et al., 2007).

4.4. Motivation

Die Motivation des Klienten beziehungsweise der Wille zur Aufnahme einer Arbeit beeinflussen sowohl den Vermittlungserfolg von SE als auch PVT positiv (Beijerholm & Björkman, 2010; Medalia & Saperstein, 2011). Insbesondere bezogen auf SE wird das Erlangen und Halten einer Arbeit mit einer Verringerung der Symptome, erhöhter Lebensqualität und einer Aufgabe im Leben in Verbindung gebracht. Dies steigert die Motivation der Klienten, sich in das SE Angebot einzubringen (Bond

et al., 2001). Die Motivation des Klienten kann zudem gestärkt werden, wenn der Job Coach die Meinungen und Wünsche des Klienten wahrnimmt (Catty et al., 2011).

Angebotsspezifische Faktoren bei SE

Die folgenden Ergebnisse beziehen sich ausschließlich auf SE Angebote.

5. SE Faktoren

5.1. Genauigkeit des Ansatzes

Um ein gutes SE Angebot gewährleisten zu können, wird das präzise Einhalten der sieben IPS Kriterien als wichtig erachtet (Tab. 5). Diese Kriterien beinhalten: schnelle Jobsuche, Arbeitsstelle im ersten Arbeitsmarkt, Berücksichtigung der Präferenzen des einzelnen Klienten, unlimitierte Unterstützung, interdisziplinäre Zusammenarbeit, individuelle Unterstützung und Sozialrechtsberatung [Fig. 1; Becker & Drake, 1993; Campbell et al., 2010). Einige Autoren haben anhand der IPS Fidelity Scale (Bond, Becker, & Drake, 2011) überprüft, inwiefern diese Faktoren entscheidend für den Erfolg des Programms sind. Dieses Messinstrument wurde speziell für die Erhebung der Modelltreue von SE entwickelt. Je exakter die Kriterien eingehalten werden, desto zufriedener waren die Klienten in mehreren Studien mit dem SE Angebot (Bond & Drake, 2008; Campbell et al., 2010; Becker et al., 2011). Zudem konnte eine erhöhte Stellenvermittlungsrate verzeichnet werden (Becker et al., 2006). Taylor und Bond (2012) konnten aufzeigen, dass Job Coaches bessere Erfolge hatten, wenn sie mehr Klienten unterstützten.

5.2. Arbeits- und Coachingpensum

Im Allgemeinen wurde für SE festgestellt, dass Klienten mit einer schweren Erkrankung mehr Unterstützung bei der beruflichen Wiedereingliederung benötigen (McGurk et al., 2003). Zito et al. (2007) fanden in einer Studie heraus, dass die benötigte Unterstützung der SE-Klienten sinkt, je mehr bzw. je länger sie arbeiten. Dies bedeutet auch, dass zu Beginn eines Coachings intensivere Unterstützung notwendig ist, diese mit der Erhöhung der Arbeitszeit jedoch abnimmt. Eine weitergeführte Unterstützung während des Jobs durch den Job Coach wird von den Klienten als hilfreich empfunden (Glover & Frounfelker, 2013) und sogar als eine Notwendigkeit für die Nachhaltigkeit von SE benannt (Jäger et al., 2013).

5.3. Beziehung zwischen Klient und Job Coach

Ein weiterer Faktor für den Vermittlungserfolg ist die Beziehung zwischen Klient und Job Coach. Eine vom Klienten als positiv bzw. vertrauensvoll empfundene Beziehung wirkt sich auf die Motivation des Klienten und somit auch auf die Mitwirkungsbereitschaft günstig aus (Catty et al., 2011). In einer qualitativen Studie gaben die Job Coaches zudem an, dass wenn auch sie gegenüber dem Klient optimistisch und voller Hoffnung waren, dies zu einer besseren Vermittlungsquote führte (Tschopp et al., 2007).

5.4. Eigenschaften des Job Coaches

Es gibt Hinweise darauf, dass der Vermittlungserfolg bei SE höher ist, wenn die Job Coaches ausschliesslich für diese Tätigkeit angestellt werden (Becker et al., 2001). Glover und Frounfelker (2013) fanden heraus, dass Job Coaches, die gute Vermittlungserfolge aufzeigen konnten, vor allem über eine ausgeprägte Effizienz (d.h. gutes Zeitmanagement, Prioritäten setzten, Stressresistenz) verfügten und eine gute Beziehung zu Klienten und Kollegen pflegten.

6. Externe Faktoren

6.1. Arbeitslosenrate

Die Arbeitslosenrate der Region, in der SE angeboten wird, beeinflusst ebenfalls den Erfolg des Angebotes (Bond & Drake, 2008). Als Erklärung hierfür wird angeführt, dass hohe Arbeitslosigkeit mit weniger Vermittlungsmöglichkeiten verbunden ist und die Klienten in dieser Region eine größere Resignation
empfinden (Tab. 6). Diese Resignation steht wiederum in Zusammenhang mit verminderter Motivation, welche zu einem verminderten SE Erfolg führt (Becker et al., 2006).

6.2. Umgebungsfaktoren

Entscheidend für den Erfolg des SE Ansatzes ist auch die öffentliche Präsenz des Angebotes. So wurde von Becker et al. (2001) festgestellt, dass die Bekanntheit sowie der Ermittlungserfolg von SE höher waren, wenn es nicht nur in den Kliniken, sondern auch in anderen öffentlichen Einrichtungen angeboten wurde.

Diskussion

Das Ziel dieses Übersichtsartikels ist die Identifikation von Variablen, die mit dem Vermittlungserfolg auf den ersten Arbeitsmarkt bei verschiedenen Ansätzen der Arbeitsrehabilitation für Menschen mit psychischen Erkrankungen assoziiert sind. In der vorliegenden Arbeit wird, im Gegensatz

zu bereits existierenden Arbeiten, bei der einzelnen Betrachtung der Prädiktoren zusätzlich eine Unterscheidung zwischen den einzelnen Formen von Arbeitsrehabilitation (SE und PVT) gemacht.

Klientenbezogene Faktoren

Bereits Anthony und Jansen (1984) stellten fest, dass die Diagnose kein Prädiktor für die zukünftige Arbeitsleistung eines psychisch erkrankten Menschen ist. Die vorliegende Arbeit zeigt dennoch auf Grundlage diagnosebezogener Untersuchungen wie z.B. EQOLISE (Burns et al., 2007) auf, dass SE für Menschen mit schweren psychischen Störungen (Schizophrenie und Bipolar Affektive Störung) ein erfolgreicher Ansatz ist. Auch zeigt sich, dass, je ausgeprägter die Erkrankung ist, eine Unterstützung durch SE umso sinnvoller ist (Campbell et al., 2010). Die Effektivität bezüglich anderer Diagnosen sollte durch weitere Untersuchungen genauer überprüft werden (Viering et al., 2013; Nordt et al., 2012). Zudem sollte der Faktor Alter angesichts der widersprüchlichen Datenlage noch genauer untersucht werden, um ggf. spezifische Vorgehensweisen bei verschiedenen Alterskategorien entwickeln zu können.

Da sich motivationsfördernde Faktoren, wie der Wille des Klienten wieder zu arbeiten, positiv auf SE auswirken (Beijerholm & Björkman, 2010), sollte weiter nach Faktoren geforscht werden, welche sich motivierend auf den Klienten auswirken.

Arbeitserfahrung konnte ebenfalls als prädiktiv für die Wiedereingliederung in den ersten Arbeitsmarkt (Tsang et al., 2010) identifiziert werden. Bei beiden Ansätzen besteht eine bessere Vermittlungschance, wenn der Klient bereits über Arbeitserfahrung verfügt. Hinweise existieren, dass zu einer erfolgreichen Arbeitsrehabilitation für Menschen mit Schizophrenie die Kombination zwischen kognitivem Training und SE zu besseren Vermittlungserfolgen führt als SE allein (McGurk et al., 2005; 2007). Ähnliches gilt auch für die Kombination von PVT und dem Training sozialer Kompetenzen (Tsang, 2011). Es erscheint daher sinnvoll, Zusatzfaktoren, die die Vermittlungserfolge beider Strategien verbessern können, noch genauer zu untersuchen und ggf. auch weitere Kombinationen prospektiv zu testen.

Kontextuelle und Job-Coach-bezogene Faktoren

Bezüglich kontextuellen und Job-Coach bezogenen Variablen, die zu einer erfolgreichen Vermittlung führen ist vor allem das Einhalten der IPS Prinzipen wichtig (Modelltreue) (Becker et al., 2001; Bond & Drake, 2008; Bond et al., 1997). Zudem scheint es grundlegend zu sein, dass die Beziehung zwischen Klient und Job Coach von Vertrauen und Optimismus geprägt ist (Catty et al., 2011). Faktoren, die den Beziehungsaufbau der Job Coaches mit dem Klienten positiv beeinflussen, sollten daher näher betrachtet werden. Das überraschende Ergebnis von Taylor und Bond (2012), dass eine größere Zahl

betreuter Klienten pro Job Coaches mit einem besseren Vermittlungsergebnis einhergeht, wirft die Frage auf, ob jedes der Prinzipien von SE in der gegebenen Form bestehen bleiben sollten.
Weiter bestehen hinsichtlich der Eigenschaften des Job Coaches noch einige Unklarheiten. Zwar beschreiben einige Autoren, dass Job Coaches vor allem über Effektivität in der Vorgehensweise, gute Vernetzung und interpersonelle Fähigkeiten verfügen sollten (Bond & Drake, 2008), doch gibt es hierzu kaum weiterführende Literatur. Einige Autoren beschreiben den Job Coach sogar als den Faktor, der den Erfolg von SE am deutlichsten beeinflusst (McGurk et al., 2003).

Bei der Untersuchung von Wirkfaktoren der Psychotherapie zeigt sich, dass die Beziehung zwischen Therapeut und Patienten einer der entscheidendsten Faktoren für eine erfolgreiche Therapie ist. Die therapeutische Beziehung wird neben Empathie, Authentizität und Respekt vor allem durch Vertrauen und Engagement bestimmt (Flückiger et al., 2012). Analog dürfte die Beziehung eines Klienten mit dem Job Coach eine entscheidende Rolle für den Vermittlungserfolg spielen. Dies sollte ebenfalls Gegenstand weiterer Untersuchungen sein.

Bezüglich des Faktors "Arbeits-/Coachingpensum“ empfehlen Nordt et al. (2012) eine Präzisierung der Stundenzahl des Coachings, die zu einem optimalen Vermittlungserfolg führt.

In der vorliegenden Arbeit wird zudem aufgezeigt, dass sich die Präsenz eines Angebotes auf den Erfolg niederschlägt. Im deutschsprachigen Raum fehlt es bis anhin an einer flächendeckenden Versorgung mit beruflichen Rehabilitationsmassnahmen (Weig et al., 2011). Insbesondere die Implementierung von SE als flächendeckendes Angebot gestaltet sich durch die Verhaftung im traditionellen Stufenleitermodel der Rehabilitation als schwierig (Hoffmann, 2013). Durch die aufgeführten Studien, wird noch einmal die Dringlichkeit der flächendeckenden Implementierung von SE deutlich. Auch zeigt diese Übersichtsarbeit auf, dass das Prinzip der interdisziplinären Zusammenarbeit zum Erfolg von SE beitragen kann (Gold et al., 2006).

Vergleich zwischen SE und PVT

Ein umfassender Vergleich prädiktiver Faktoren zwischen SE und PVT ist nur eingeschränkt möglich, da hierzu nur wenig methodisch tragfähige Untersuchungen durchgeführt wurden. Dies könnte auch ein Grund, für die fehlende Unterteilung der verschiedenen Formen von Arbeitsintegration in vergangenen Übersichtsarbeiten (Tsang et al., 2010; Matschnig et al., 2008) sein. Es zeigt sich aber dennoch, dass viele soziodemografische und klinische Faktoren weder bei SE noch bei PVT einen Einfluss auf den Vermittlungserfolg haben. In einer katamnestischen Untersuchung der Zürcher Teilnehmenden der EQOLISE Studie konnte festgestellt werden, dass bei den Probanden der SE-Gruppe nach Ablauf

der Studie im Gegensatz zu der PVT-Gruppe eine Reduktion der zur Verfügung stehenden finanziellen Mittel zu verzeichnen war im Gegensatz zu der PVT-Gruppe (Jäger et al., 2013).

Limitationen

Die Methodik dieses Artikels weist Limitationen auf. So wurden Studien mit unterschiedlichen Vorgehensweisen (Metaanalysen bis kleine Querschnittsstudien) zu verschiedenen Themenbereichen (Einflussfaktoren, Effektivität, Vergleich zwischen Interventionen) berücksichtigt.

Die Darstellung der Literatur ist rein deskriptiv und beinhaltet keine Metaanalyse. In den hier dargestellten Studien wurden unterschiedliche Ein- und Ausschlusskriterien sowie Methoden verwendet, so dass eine direkte Vergleichbarkeit nur eingeschränkt möglich ist. Die Anzahl der berücksichtigten möglichen prädiktiven Faktoren ist ebenfalls beschränkt. Verschiedene Arten von Stigma dürften ebenfalls prädiktiven Charakter haben (Yanos, Lysaker, & Roe, 2010). Angesichts der verschiedenen Stigmaformen und der Vielgestaltigkeit der damit verbundenen Interventionen könnte dies gleichzeitig Gegenstand einer eigenständigen Übersichtsarbeit sein. Eine weitere Limitation ist, dass in diesem Artikel nur Studien berücksichtigt werden konnten, die in Englisch oder Deutsch verfasst wurden. Eventuell ergäbe sich ein erweitertes Bild, wenn man Artikel aus anderen Sprachregionen einbeziehen würde; dies gilt auch für die Verwendung anderer Suchalgorithmen.

Zusammenfassung

Zusammenfassend ist festzuhaltend, dass sich SE im Allgemeinen in den letzten Jahren sehr bewährt hat. Die zusätzlichen Prädiktoren, über die SE im Gegensatz zu PVT verfügt (z.B. Job Coach) machen den Ansatz besonders erfolgreich. Motivation, erworbene Arbeitserfahrung, positive Erwartungshaltung und die Eigenschaften des Job Coaches sind entscheidende Faktoren, die den Erfolg von SE positiv beeinflussen. Zudem ist es für den Erfolg des Ansatzes wichtig, sich prinzipiennah an die IPS Kriterien zu halten. Die Ergebnisse dieses Reviews unterstützen die Empfehlung der eingangs erwähnten S3-Leitlinien Psychosoziale Therapien der DGPPN. Diese Arbeit untermauert die Annahme, dass es wichtig ist, SE zu einem gut etablierten Standardangebot in der Versorgung psychisch kranker Menschen auszuweiten.

Systematic ordered tables of literature

Tab 1. Einfluss Personenbezogener Faktoren auf die Arbeitsrehabilitation psychisch kranker Menschen in SE/PVT

Literaturquelle	N	Studiendesign	Ergebnisse
1.1.Diagnose			
Campbell et al. 2011		Metaanalyse	SE zeigt bessere Vermittlungszahlen auf als PVT, weder klinische noch demografische Variablen haben einen Einfluss auf den Erfolg von SE/ PVT.
Twamley et al. 2012	58	Randomized Controlled Trial	SE eignet sich gut für Patienten im mittleren Alter mit Schizophrenie.
Baksheev et al. 2012	41	Randomized Controlled Trial	SE eignet sich gut bei Patienten mit einer Erstpsychose für eine erfolgreiche Arbeitsvermittlung.
Campbell et al. 2010	681	Randomized Controlled Trial	In der PVT Gruppe konnten Menschen mit einer leichten psychischen Störung besser vermittelt werden. SE ist die beste Wahl wenn man unter einer schweren psychischen Erkrankung leidet und wieder in den ersten Arbeitsmarkt vermittelt werden möchte.
Biegel et al. 2009	191	Längsschnittstudie	Menschen mit Arbeitserfahrung nehmen SE gerne in Anspruch, wohingegen Menschen, die sich selbst als behindert wahrnehmen oder drogenabhängig sind, SE seltener nutzen.
Rosenheck et al. 2006	1400	Randomized Controlled Trial	Die Eingliederung in den Arbeitsmarkt.wird durch die Erkrankung der Schizophrenie erschwert.
Medalia & Choi 2009		Review über 6 Metaanalysen	Ansätze zur Verbesserung kognitiver Fähigkeiten bei Schizophrenie erkrankten Personen zeigen moderate Effekte. Durch die neu erlernten Fähigkeiten können wieder soziale Rollen aufgenommen werden.
Killackey et al. 2008	41	Randomized Controlled Trial	IPS zeigten gute Vermittlungserfolge auf für Menschen mit einer Erstpsychose
1.2. Einfluss von Medikamenten			
Twamley et al. 2008	50	Randomized Controlled Trial	Die Medikation eines Klienten hat keinen Einfluss auf die Arbeitsrehabilitation

Tab 2. Einfluss soziodemografischer Faktoren auf die Arbeitsrehabilitation psychisch kranken Menschen in SE/PVT

Literaturquelle	N	Studiendesign	Ergebnisse
2.1. Alter			
Burke-Miller et al. 2012	1272	Randomized Controlled Trial	Junge Erwachsene (18-30 Jahre) können signifikant besser mit SE vermittelt werden als ältere Probanden (> 30 Jahre).
Twamley et al. 2012	58	Randomized Controlled Trial	SE eignet sich gut für Patienten im mittleren und fortgeschrittenen Alter mit Schizophrenie.
Baksheev et al. 2012	41	Randomized Controlled Trial	Weder klinische noch demografische Faktoren haben einen signifikanten Einfluss auf den Vermittlungserfolg.
Campbell et al.2011		Metaanalyse	Weder klinische noch demografische Variablen haben einen Einfluss auf den Erfolg von SE.
2.2. Geschlecht			
Campbell et al. 2011		Metaanalyse	Demografischer Faktor Geschlecht hat keinen Einfluss auf den Erfolg von SE.
Catty et al. 2011	312	Randomized Controlled Trial	SE konnte einen besseren Erfolg aufzeigen, falls der Klient und Therapeut das gleiche Geschlecht hatten.
2.3. Zivilstand			
Gold et al. 2006	177	Randomized Controlled Trial	Der Zivilstand des Klienten hat keinen Einfluss auf den Erfolg von SE oder PVT.
Drake et al. 2013	351	Langsschnitt-studie	Der Zivilstand eines Menschen hat keinen signifikanten Einfluss auf den Erhalt einer Arbeit.

Tab 3. Einfluss von Trainings Faktoren auf die Arbeitsrehabilitation psychisch kranken Menschen in SE/PVT

Literaturquelle	N	Studiendesign	Ergebnisse
3. Kognitives Training			
McGurk et al. 2005	44	Randomized Controlled Trial	Die Kombination zwischen SE und kognitivem Training führt zu besseren Vermittlungsergebnissen als SE allein.
Medalia & Choi 2009		Review über 6 Metaanalysen	Kognitive Remediation ist ein Ansatz um die kognitiven Fähigkeiten Schizophrenie erkrankter Personen zu verbessern. Durch die Verbesserung der kognitiven Fähigkeiten können dann auch wieder die sozialen Rollen erfüllt werden.
McGurk et al. 2007	44	Randomized Controlled Trial	Die Kombination aus SE und kognitivem Training ist effektiver als SE allein.
Wexler & Bell 2005		Review	Die Kombination aus SE/PVT und kognitivem Training führt zu erhöhten Vermittlungszahlen.
Tsang et al. 2010		Review	Kognitive Fähigkeiten zeichnen sich als einer der deutlichsten Prädiktoren für eine erfolgreiche Wiedereingliederung ab.
Vauth et al. 2005		Randomized Controlled Trial	Computer basierte Trainings die Defizite in Lang- und Kurzzeitgedächtnis entgegenwirken, führen in Kombination mit PVTs zu guten Vermittlungserfolgen.
Kurtz 2011		Review	1) Aufmerksamkeit, Gedächtnis und andere neurokognitive Fähigkeiten verbessern sich durch das Training von sozialen Kompetenzen, durch Arbeitstherapie bzw. SE 2) Aufmerksamkeit, Gedächtnis und Lösungsstrategien verbessern sich mit der Teilnahme an Arbeitstherapie bzw. SE
3.2. Andere Trainings			
Catty et al 2008	312	Randomized Controlled Trial	Menschen die höhere soziale Kompetenzen am Arbeitsplatz zeigten, arbeiteten länger und fanden schneller einen Job.
Gühne et al. 2013		Review	Das Training sozialer Fertigkeiten führt zu einer verbesserten sozialen Anpassung bei Menschen mit einer psychischen Erkrankung.
Tsang 2001	140	Randomized Controlled Trial	Das vorgestellte Training ist in Kombination mit PVT effektiv in der Steigerung von sozialen Kompetenzen und der Wiedereingliederungsrate von psychisch kranken Menschen.

Tsang & Pearson 2001	97	Randomized Controlled Trial	Soziale Kompetenzen Training hilft bei der Wiedereingliederung durch PVT, vor allem wenn die Unterstützung weitergeführt wird.
Wallace & Tauber 2004	42	Randomized Contolled Trial	Die Kombination aus Training und SE führt zu höherer Arbeitszufriedenheit und weniger Stellenfluktuation als SE allein. Kein Unterschied wurde bzg Verdienst und Arbeitsstunden zwischen den Gruppen gefunden.
Mueser et al. 2005	35	Randomized Controlled Trial	Ein zusätzliches Kompetenzen Training erhöht nicht die Wiedereingliederungsrate von SE.
3.3. ACT-IPS			
Gold et al. 2006	177	Randomized Controlled Trial	Kombination von interdisziplinären Behandlungs-Teams (ACT) und IPS führen zu einem besseren Ergebnis bei Menschen in ländlichen Gegenden als PVT.

Tab. 4. Arbeitsbezogene Faktoren für die Arbeitsrehabilitation psychisch kranker Menschen in SE

Literaturquelle	N	Studiendesign	Ergebnisse
4.1 Arbeitserfahrung			
Catty et al. 2008	312	Randomized Controlled Trial	Verfügten Klienten über Arbeitserfahrung konnten sie besser und länger durch SE wieder in den ersten Arbeitsmarkt vermittelt werden.
Campbell et al. 2010	681	Randomized Controlled Trial	Arbeitserfahrung ist der einzige signifikante Prädiktor für die Jobsuche.
Cobière et al. 2009	366	Querschnitts-studie	Arbeitserfahrung ist ein wichtiger Prädiktor um wieder Selbstwertgefühl aufbauen zu können.
Biegel et al. 2009	191	Längsschnitt-studie	Arbeitserfahrung hat einen indirekten Einfluss auf SE, da häufig Menschen ohne Arbeitserfahrung nicht an SE teil-nehmen.
4.2 Ausbildungsniveau			
Frounfelker et al. 2011	154	Review	Das Ausbildungsniveau der Klienten wirkt sich nicht auf den Erfolg von SE oder PVT aus.
Campbell et al. 2011		Metaanalyse	Demografische Faktoren wie das Ausbildungsniveau der Klienten haben keinen Einfluss auf den Vermittlungserfolg von SE.
Twamley et al. 2012	58	Randomized Controlled Trial	Das Ausbildungsniveau der Klienten hat keinen Einfluss auf den Erfolg von SE.
4.3 Erfolgserwartungen zu Beginn des Job Coachings			
Reker & Eikelmann 1998	83	Längsschnitt-studie	Erfolgserwartungen können als Prädiktor für eine gute Ar-beitsrehabilitation in Arbeitstherapien gesehen werden.
Tschopp et al. 2007	13	Qualitative Studie	Die Erwartungen der Klienten aber auch des Anbieters soll-ten ernsthaft, hoffnungsvoll und optimistisch sein um zu einem Erfolg bei SE zu führen.
4.4 Motivation			
Bejerholm & Björkmann 2010	120	Querschnitts-studie	Durch die Stärkung der Eigenverantwortlichkeit eines Klien-ten wird der Erfolg von SE gesteigert.
Medalia & Saperstein 2011		Review	Die Intrinsische Motivation des Klienten hat Einfluss auf den Erfolg von Psychosozialen Behandlungen.
Bond et al. 2001	149	Längsschnitt-studie	Menschen die durch SE betreut und Arbeit gefunden haben, zeigen weniger Symptome, höhere Lebensqualität und zei-gen somit auch mehr Motivation im Arbeitsmarkt erfolgreich integriert zu bleiben.
Catty et al. 2011	312	Randomized Controlled Trial	1) Eine gute Beziehung zwischen Therapeut und Klient füh-ren zu einer erhöhten Motivation 2) die positive Bewertung fiel in der IPS Gruppe höher aus.

Tab 5. Angebotsspezifische Faktoren bei SE

Literaturquelle	N	Studiendesign	Ergebnisse
5.1 Genauigkeit des Ansatzes			
Bond et al. 2011		Review	Das genaue Beachten der IPS Kriterien führt zu einer deutlichen Verbesserung der Wiedereingliederungsrate.
Campbell et al. 2010	681	Randomized Controlled Trial	Psychisch erkrankten Menschen die wieder arbeiten wollen, profitieren am besten, falls die Richtlinien von SE strikt eingehalten werden.
Becker et al. 2006		Querschnitts-studie (Information von 26 Gesundheits-zentren)	Je besser man IPS einhält, desto grösser der Erfolg.
Becker et al. 2001	2639	Querschnitts-studie	Prinzipien des SE Ansatzes sollten genau eingehalten werden. Job Coaches sollten mit einem Vollzeit-Pensum angestellt werden.
Taylor & Bond 2011	57	Querschnitts-studie	Je mehr Klienten ein Job Coach hat, desto erfolgreicher ist er.
5.2 Arbeitspensum			
McGurk et al. 2003	30	Längsschnitt-studie	Coachingbedarf hängt mit der Ausprägung der Kognitiven Defizite durch die Erkrankung zusammen.
Glover & Frounfelker 2013	12	Deskriptive Studie	Die weiterführende Unterstützung von einem Job Coach wird als hilfreich empfunden.
Zito et al. 2007	69	Randomized Controlled Trial	Je mehr ein Klient arbeitet, desto weniger Unterstützung durch einen SE Job Coach ist nötig. Menschen mit der Tendenz zu sozialem Rückzug gelten als intensivste Klienten.
Jäger et al. 2013	50	Katamnestische Untersuchung	Wird das Coaching von SE nicht weitergeführt ist dies eine Gefahr für die Nachhaltigkeit der Ergebnisse.
5.3 Beziehung zwischen Klient und Job Coach			
Catty et al. 2011	312	Randomized Controlled Trial	Eine gute Beziehung zwischen Job Coach und Klient wirkt positiv auf die Motivation des Klienten aus.
Tschopp et al. 2007	13	Qualitative Studie	SE wirkt, wenn eine vertrauensvolle, optimistische Beziehung vorherrscht.
5.4 Eigenschaften des Job Coaches			
Becker et al. 2001	2639	Querschnitts-studie	Vollzeitbeschäftigte Job Coaches weisen einen besseren Vermittlungserfolg auf.
Glover & Frounfelker 2013	12	Deskriptive Studie	Job Coaches die gute Vermittlungserfolge ausweisen sind gut organisiert, stressresistent, haben gute interpersonelle Fähigkeiten (mit Klienten und Kollegen).

Tab 6. Externe Faktoren

Literaturquelle	N	Studiendesign	Ergebnisse
6.1 Arbeitslosenrate			
Becker et al. 2006		Querschnitts-studie (Informati-onen von 26 Gesundheits-zentren)	Je höher die Arbeitslosenrate ist, desto geringer ist die Moti-vation von Klient wieder arbeiten gehen zu wollen.
Bond & Drake 2008		Review	Beweise verdichten sich, je höher die Arbeitslosenrate ist, desto schwieriger ist es, Klienten zu vermitteln.
6.2 Umgebungsbedingungen			
Becker et al. 2001	2639	Querschnitts-studie	SE sollte außerhalb der Kliniken angeboten werden, um den Erfolg von SE zu erhöhen.

Figur 1.

Prinzipien von Individual Placement and Support	Klienten Wünsche sollten berücksichtigt werden
	Eingliederung in den ersten Arbeitsmarkt
	Beratungshilfe bei Fragen zu Sozialhilfe
	Zusammenarbeit unterschiedlicher Berufsgruppen
	Schnelle Jobsuche
	Individualisierte Unterstützung
	Zeitlich unlimitierte Unterstützung
	Der Job Coach muss ein Netzwerk mit potentiellen Firmen aufbauen

4.3 Study 1

Supported employment for the reintegration of disability pensioners with mental illnesses: a randomised controlled trial

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Summary

Work is beneficial for the recovery from mental illness. Although the approach of individual placement and support (IPS) has been shown to be effective in Europe, it has not yet been widely implemented in European health care systems. The aim of this randomized controlled trial was to assess the effectiveness of IPS for disability pensioners with mental illnesses new on disability benefits in Switzerland. In the study at hand, 250 participants were randomly assigned to either the control or the intervention group. The participants in the intervention group received job coaching according to IPS during two years. The control group received no structured support. Both groups were interviewed at baseline and followed up every six months (baseline, 6, 12, 16, 18, 24 months) for two years. Primary outcome was to obtain a job in the competitive employment. IPS was more effective for the reintegration into the competitive employment market for disability pensioners than the control condition. 32% of the participants of the intervention group and 12% of the control group obtained new jobs in the competitive employment. IPS is also effective for the reintegration into competitive employment of people with mental illness receiving disability pensions.

Keywords: Supported employment, social security disability insurance, mental illness, individual placement and support

Introduction

The number of people with mental illness actually working in the competitive employment market constitutes only about 10–20 % (Burns et al., 2009). However, people with mental disorders wish to work in the competitive employment market. Furthermore, paid work is acknowledged as beneficial for recovery (Areberg et al., 2013), against stigma (Corrigan, Powell, & Rüsch, 2012), self-esteem, quality of life (Becker, Drake, & Bond, 2011), and suicide prevention (Nordt et al., 2015).

To reintegrate people with mental illness into competitive employment, two different vocational rehabilitation approaches exist. The first one, pre-vocational rehabilitation (PVR), has a long tradition in psychiatric rehabilitation and is based on the principle "first train then place". This includes the training of skills and competencies relevant for employment delivered mainly in sheltered workplaces. Those services are firmly anchored in German-speaking areas (Doose, 2012; Hoffmann, 2013). The second approach, supported employment (SE), relies on the principle "first place then train". This implies an integration into the competitive employment market in the first place with continuous support by a job coach, but without any preparatory training in a protected environment. In 1994, Becker and Drake (1994) defined a specific SE approach for people with mental illness, which was supplemented by Drake, Bond, and Becker (2012). This approach is called Individual Placement and Support (IPS) and it is considered the best defined SE-method. IPS is based on eight principles: a) competitive employment is the goal, b) focus on individuals` preferences, c) welfare benefit counselling, d) work closely with other care systems, e) rapid job search, f) individualized support, g) time unlimited follow on support (also when the individual loses a job), and h) the job coach needs to build up a network with potential future employers. In the past years, studies showed that IPS leads to improved competitive employment rates among individuals with mental illness compared to PVR (Bond et al., 2008; Bond, Becker, Drake, & Vogler, 1997; Becker, Smith, Tanzman, Drake, & Trembley, 2014). The effectiveness of the IPS approach has been well studied especially within the context of the US labour market (Bond et al., 2008). Furthermore, there is strong evidence that the IPS approach is effective in Europe, despite considerable variabilities in healthcare and social security systems compared to the US (Burns et al., 2007; Marshall et al., 2014). Although SE produces better employment outcomes and is more cost effective than PVR (Knapp et al., 2013), it has not been widely implemented in European health care systems (Brieger & Hoffmann, 2012). This also accounts for Switzerland.

People suffering from mental illness frequently lose their jobs due to permanent disabilities caused by the illness (Brohan et al., 2012). In Switzerland, it is possible to receive a full or partial pension

when a disabling mental disorder can be verified. That means, if a person is considered fully incapacitated to work, a full pension will be paid. If a person is still able to work part-time, he or she will receive a partial pension. Until 2010 the Swiss Federal Social Insurance Office (Bundesamt für Sozialversicherungen, BSV) registered a constant increase of people receiving disability pensions due to mental disorders (Schweizerische Sozialversicherungsstatistik, 2014). Since then this number of disability pensioners has been constant. The usual procedure in Switzerland is that once a person receives a disability pension the further rehabilitative support from the social insurance agency is limited, i.e. there are no structured efforts to reintegrate pensioners back into the competitive employment market. This can potentially lead to permanent unemployment and the mental disorder may become chronic (Marrone & Golowka, 1999). Early IPS for disability pensioners may be a solution for this problem (Skivington, Benzeval, & Bond, 2014). The aim of this trial was to assess the effectiveness of IPS for pensioners due to mental illness at an early stage. Furthermore, we investigated the impact of IPS on secondary vocational outcomes.

Methods and Materials

Study design and participants

ZhEPP (Zürcher Eingliederungs Pilot Projekt, eng.: Zurich reintegration pilot project; ISRCTN54951166; Viering et al., 2013) was carried out as a randomised controlled trial (RCT) at the University Hospital of Psychiatry Zurich (PUK). The study was conducted between January 2011 and September 2014. Possible participants qualified for enrolment if they lived in the canton of Zurich and received a disability pension (full or partial) due to mental illness for no longer than one year. The participants needed to be aged 18 years of age or older, wish to enter the competitive employment market or to remain there if they already had a job. Furthermore, all participants had to be in psychiatric and/ or psychotherapeutical treatment during the whole study period. Mental retardation (diagnosed as ICD-10: F7) and organic mental disorder (diagnosed as ICD-10: F0) were exclusion criteria. A target sample size of 250 people was aspired. After having given informed consent the participants were randomly assigned to either IPS or the control group (see figure 1). For the purpose of randomization, a list of numbers was created based on a Bernoulli distribution, a form of binomial probability distribution. Each participant was randomised according to that list.

During the following study period of two years all participants were interviewed five times (at baseline, after 6, 12, 18, and 24 months) by research assistants. It was hypothesized that disability pen-

sioners supported by IPS could be reintegrated more often into the competitive employment market than people who received the usual procedure applied in Switzerland and no additional support. Secondly, according to past research (Bond et al., 2008), we hypothesized that disability pensioners supported through IPS would work more hours and months and gain longer job tenure compared to the participants of the control group.

The ZhEPP study was funded by a grant from the Federal Social Insurance Office (BSV). The funding source had no influence on the design and the implementation of the study. The funding was not used to amplify the individuals` income. The trial was conducted in accordance with the principles of good clinical practice and with the Declaration of Helsinki and its later amendments. The study was approved by the Ethics Committee of the Canton of Zurich (KEK-ZH-NR: 2010-0311/0). The corresponding author had full access to all the data in the study and had final responsibility for the decision to submit for publication.

Intervention and control conditions

The intervention relied on the SE approach IPS. In total, there were four job coaches enrolled. Two of them were full-time employed, the other part time. All of them had a degree in psychology. The coaching frequency and the coaching duration of each session were determined individually by the job coach and the client. No training of abilities or social skills neither any assessments of skills were administered beforehand. The job coach gave support during the application procedure (eg. establishing realistic goals, writing applications, preparation of the job interview), and continued providing support according to the IPS principles during the participant employment (eg. how to cope with workplace stressors including interpersonal conflicts with colleagues). The support was continued also in cases of job loss. Participants of the control group were free to choose for other vocational services including PVR, but were not supported by a job coach of ZhEPP. The Primary outcome of the study was for the participants to obtain a job in competitive employment. We accepted the primary outcome as fulfilled if the job was obtained by standard application procedure (written application, CV and job interview) and if the job was kept for at least one month. Secondary outcome parameters were the average number of hours and months worked, the number of months employed and job tenure of the longest held job by the participant during the study period.

Procedure and materials

Participants were followed-up for 24 months after the first interview. Data concerning socio-demographic characteristics, vocational outcome, hours worked, month employed and job tenure were gathered using a structured questionnaire. All questionnaires were administered every six months. In the IPS group job status was assessed every time a participant obtained a new job. The IPS fidelity scale was administered every three months. This 15 item-scale is a well-researched tool that evaluates the compliance of the service to the IPS principles as described in the introduction (Bond et al., 2011). High fidelity of the approach was stated if a job coach reached a score between 66 and 76 and moderate fidelity was rated for scores between 56 to 66. If the score of a job coach is less than 55 the fidelity of IPS services is considered insufficient (Bond et al., 1997). Participants received expenditure compensation of about 60 CHF (ie. 40 £) per interview (paid by parts of the funding of the BSV). Participants' psychiatric diagnoses were gathered from the files of the IV-institution Zurich. All diagnoses were based on the International Classification of Diseases (ICD-10) and had been diagnosed by medical doctors.

Statistics

For the general analyses a sample size of 250 persons had been calculated using power analysis software G*Power (Faul, Erdfelder, Lang, & Buchner, 2007). A medium effect size (0.42 SD) should be detected with a power of 95% at a two tailed significance level of 0.05. All statistical analyses were conducted with SPSS 20.0. Data of all participants were analysed as intention-to-treat. For that, the last observation carried forward (LOCF) method was used, meaning that in case of dropout, the last observation of a participant was used to replace the missing value. As some concerns exists that the use of LOCF can lead to an overestimation (or underestimation) of the effects (Kleist, 2009), we additionally performed analyses only with the study completers (ie. drop outs were rated as missing values and only those participants who participated until the end of the study were rated). With this analysis we intended to control for the stability of the results.

Patient characteristics were analysed descriptively (means, standard deviations, frequencies and percentages). To test for normal distribution of continuous variables the Kolmogorov-Smirnov-test was applied. Mann-Whitney-U-tests were performed if the variables were not normally distributed. Categorical variables were analysed using cross-tabulations with chi square tests.

To test for the primary outcome cross tabulations and chi square tests were conducted. To test for group differences with respect of having competitive employment (i.e. being employed in the competitive employment market yes/no) over all measurements point, a generalized estimating equation

model (GEE) was conducted. GEE is an advantageous model for the analysis of repeated measurements of categorical outcome variables. GEE was squared to allow more flexibility in handling possible fluctuations regarding the primary outcome during different measurement points. The development of the participants' work in competitive employment across the study period is shown as a line graph. The differences between the single measurement points were analysed by chi-square tests. The analyses of the secondary outcome variables were restricted to people who worked in competitive employment market for at least one month. The continuous secondary outcome variables: time of longest job tenure, hours worked per month and number of months employed were analysed with respect to group differences using Mann-Whitney-U-tests.

Results

The overall drop-out-rate was 32% (79 participants, see Figure 1). The dropout rates in both groups were similar. Regarding baseline data, no significant differences between the IPS group and the control group were found (Table 1). Primary vocational outcome variables are outlined in Table 2. The primary outcome, (i.e. obtaining of a competitive employment yes/no) was scored as successfully fulfilled, if the job was kept for at least one month. The first item in Table 2 (i.e. "Total numbers of jobs obtained") summed multiple jobs of a single participant, if applicable.

Figure 2 shows the development of both groups regarding employment rates using LOCF. The GEE method revealed significant interactions between the covariates time and group indicating a significant difference between the groups over time. Therefore, for each group (IPS vs. control group) add 0.288 to the intercept. (0.212; $p<0.05$). It can be seen that after 6 months the groups differ by 0.113 (Table 3).

Table 4 depicts group differences concerning the secondary (continuous) vocational variables. The variables assessed included hours and months being employed, and job tenure during the whole study process. There was no significant group difference for any of these variable for both analyses (LOCF and study completers). These results could be replicated by using the study completers only.

Moderate IPS fidelity was given throughout the whole study period (M= 61.2, SD= 3.03). Most items had high scores (min-max 3.8 - 5). However, two items, item 4 ("cooperation with other institutions and other care team individuals") and 14 ("community-oriented services"), were rated low.

Discussion

The results of our study support the assumption that IPS is effective in the reintegration of people with mental illnesses into the competitive employment market of Europe (Fioritti et al., 2014). Re-

garding the primary outcome (ie. being employed in the competitive employment market for at least one month), it has been shown that pensioners with mental illnesses supported by IPS obtained significantly more new jobs in the competitive employment market than participants of the control group. These findings are consistent with the EQOLISE study and reveal that it is useful to reintegrate disability pensioners at an early stage using IPS. However, the time criterion chosen was more conservative as in the EQOLISE-study, in which a criterion of employment for at least one day was applied (Becker et al., 2007). This inures to the benefits of common goals of psychiatric rehabilitation, i.e. participation in society, protection against social isolation (Kawohl & Lauber, 2013) and reduction of the risk that a mental illness becomes chronic (Marrone & Golowka, 1999). Furthermore, these findings were consistent with the results of the study by Drake et al. (2013). This study included Social Security Disability Insurance (SSDI) beneficiary in the US and found that the beneficiaries who received support through supported employment obtained more often competitive employment (52.4%) compared to the control group (33.0%) who received the standard procedure. However, this study lacks a time specification describing since when the beneferies received the SSDI.

Regarding the current study, the number of reintegrated participants in the IPS group increased initially, but declined slightly after 18 month while the reintegration rate of the control group increased continuously but less considerably. To our knowledge, this has not been observed in the majority of previous studies. However, in a catamnestic survey of the participants of the EQOLISE-study in Zurich a similar effect has been found (Jäger et al., 2013). One explanation could be that other studies had shorter observation periods up to a maximum of 18 months (Burns et al., 2007; Campbell et al., 2010). However, Hoffmann, Jäckel, Glauser, and Kupper (2011) stated that even the period of 24 month applied in their study was possibly too short to investigate the sustainability of IPS. Due to the follow-up of this study, it could be shown that the sustainability is given over a 5-year study period (Hoffmann et al., 2014). Another explanation for the decrease of the effect after 18 months in our study might be a spill-over-effect. This effect means that participants of the control group might be orientated towards the intervention group (Rodríguez-Muñoz, Sanz-Vergel, Demerouti, & Bakker, 2013), e.g. by being interviewed and thus being in touch with the subject of vocational rehabilitation. Further explanation could be the effect of time, meaning a rising probability of finding a job even without any support.

As this study did not find any significant differences between IPS and control group regarding hours and months worked as well as job tenure. Therefore, the assumption that IPS leads to more time being employed at work (Campbell et al., 2011) could not be supported. However, our study stands out because it includes people with mental illnesses, who already had a job at the beginning of the

study and thus earned additional salaries. However, previous studies have shown that work is beneficial for recovery, not just because of financial aspects, but also to feel needed and to build a social identity (Boardman et al., 2003). Even more important, in a worldwide survey Nordt et al. (2015) showed that unemployment is related to a 20-30% increase of the relative suicide risk. Thus effects associated with unemployment should also be targeted in the context of suicide (Webb & Kapur, 2015).

Some mental health professionals believe that going back to employment may worsen the mental health condition of their patients (Krupa, 2004). Especially stressful surroundings, common in a competitive employment market, is seen as a major risk factor to people with mental illnesses (Boardman et al., 2003). In contrast to the apprehension of the mental health professionals, previous research showed that people with mental illnesses stated that they wanted to work in competitive employment market (Lauber & Kawohl, 2013). Furthermore, based on our moderate dropout rate of about 30% and the fact that most participants dropped out during the first 6 months, we conclude that the participants who participated until the end were motivated to be reintegrated into competitive employment market.

Our study is not without limitations. Usually, high IPS fidelity leads to high effectiveness of IPS (Becker et al., 2006; Bond et al., 2008). The results of this study regarding IPS fidelity are not fully satisfactory. Especially two items of the IPS fidelity scale, cooperation with other institutions and other care team individuals and community-orientated services, did not meet a sufficient level. In addition, in this study not the latest version of IPS fidelity scale was used (Becker, Swanson, Bond, & Merrens, 2008). The fidelity study was conceptualized in 2009 and started in January 2011, the latest version was validated only in 2012.

Furthermore, to increase the knowledge about predictors influencing the effectiveness of IPS, future publications should be focused on that topic. However, the cost efficacy in Switzerland regarding IPS as a standard service has not been investigated yet. This should also be a focus of future research.
In conclusion, this study shows that mentally ill, disabled pensioners recently on social benefits in Switzerland can profit from IPS. As the results of the ZhEPP-trial supports the general finding of the effectiveness of IPS in Switzerland (Burns et al., 2007), it is indicated that IPS should be included as a standard service in vocational rehabilitation, also at an early stage of retirement.

Table 1. Patient characteristics at baseline

	IPS (n=127)	Control Group (n=123)	Total (n=250)
Age	41.7 (10.3)	43.7 (10.8)	42.6 (10.6)
Woman	69 (54%)	63 (53%)	132 (53%)
Age at first psychiatric contact (years)	31.07 (12.2)	33.56 (11.8)	32.26 (12.1)
Number of admissions in lifetime			
0	42 (33%)	33 (24%)	75 (30%)
1-5	74 (58%)	71 (58%)	145 (58%)
6-10	7 (6%)	12 (10%)	19 (8%)
11+	3 (2%)	3 (2%)	6 (2%)
Clinical diagnosis			
Mood affective disorder	60 (47%)	58 (47%)	118 (47%)
Schizophrenia/ schizoaffective disorder	21 (17%)	18 (15%)	39 (16%)
Personality disorder	22 (17%)	21 (17%)	43 (17%)
other	23 (18 %)	22 (18%)	45 (18%)
Unemployed at baseline	92 (72%)	91 (74%)	183 (73%)
Work History			
>1 month in past years	69 (54%)	57 (47%)	126 (50%)
<1 month in past year	54 (43%)	64 (52%)	118 (47%)
Number of years in school	10.2 (1.6)	10.1 (1.8)	10.2 (1.7)
Graduation			
Primary school	3 (2%)	3 (2%)	6 (2%)
Basic school (9 years)	88 (70%)	80 (65%)	168 (67%)
Abitur (High-school)	17 (13%)	20 (16%)	37 (15%)
Other	17 (13%)	16 (13%)	33 (13%)
Living situation			
Alone	68 (54%)	64 (52%)	132 (53%)
With friends/relatives	46 (36%)	45 (37%)	91 (36%)
other	13 (10%)	10 (8%)	13 (5%)
Born in country of residence	104 (82%)	91 (74%)	195 (78%)

Note. Data are mean (SD) or number (%). Some baseline characteristics were missing, since not all patients did supply this information. p> 0.05

Table 2. Employment in the yourse of the study.

	LOCF			Study completers		
	IPS (n=127)	***Control group (n= 121)***	***p***	***IPS (n=88)***	***Control group (n=85)***	***p***
Number of new jobs obtained	40 (32%)	14 (12%)	<.0001***	40 (46%)	14 (16%)	<.0001***
Number of participants with no job at baseline but in the end of study	22 (17%)	10 (8%)	.049*	19 (22%)	9 (11%)	.046*
Number of participants without any job during the study	64 (50%)	80 (66%)	.012*	35 (40%)	54 (64%)	.002**
Number of participants with continuous employment	27 (21%)	21 (17%)	.437	19 (22%)	15 (18%)	.490

Note. Date are number (%), *p < 0.05, **p < 0.01; ***p < 0.0001; the group of study completers contains results regarding solely participants who participate until the study end.

Table 3. Model estimates the amount of job regarding different measurement points.

	Estimate	SE	df	Model Fit
Intercept	-1.109	0.212***	1	1452.9
Group	0.103	0.288		
time	-0.080	0.113		
time²	0.031	0.025		
Group*time	0.599	0.164***		
Group*time²	-0.122	0.036**		

Note. Group= contains IPS and control group, time=contains the 5 different measurement points, Model Fit= time squared (curvilinier time trend)

Table 4. Results of secondary outcome variables. The table includes jobs that had been held already at the beginning of the study.

	LOCF			Study completers		
	IPS (n= 63)	***Control group (n=41)***	***p***	***IPS (n= 51)***	***Control group (n=31)***	***p***
Average month employed	41.70 (70.20)	42.94 (73.91)	.244	34.9 (61.5)	44.3 (79.6)	.209
Average hours worked per month	47.37 (30.33)	44.37 (31.19)	.552	48.6 (30.99)	41.43 (29.6)	.263
Job tenure of the longest job held	51.25 (70.63)	57.85 (81.31)	.503	43.7 (63.3)	53.1 (76.1)	.363

Note. Group has been reduced on participants who worked in competitive employment market. Data were presented as mean (SD), Mann-Whitney-U-test, *p <0.05

Figure 1. Flow chart of recruitment process

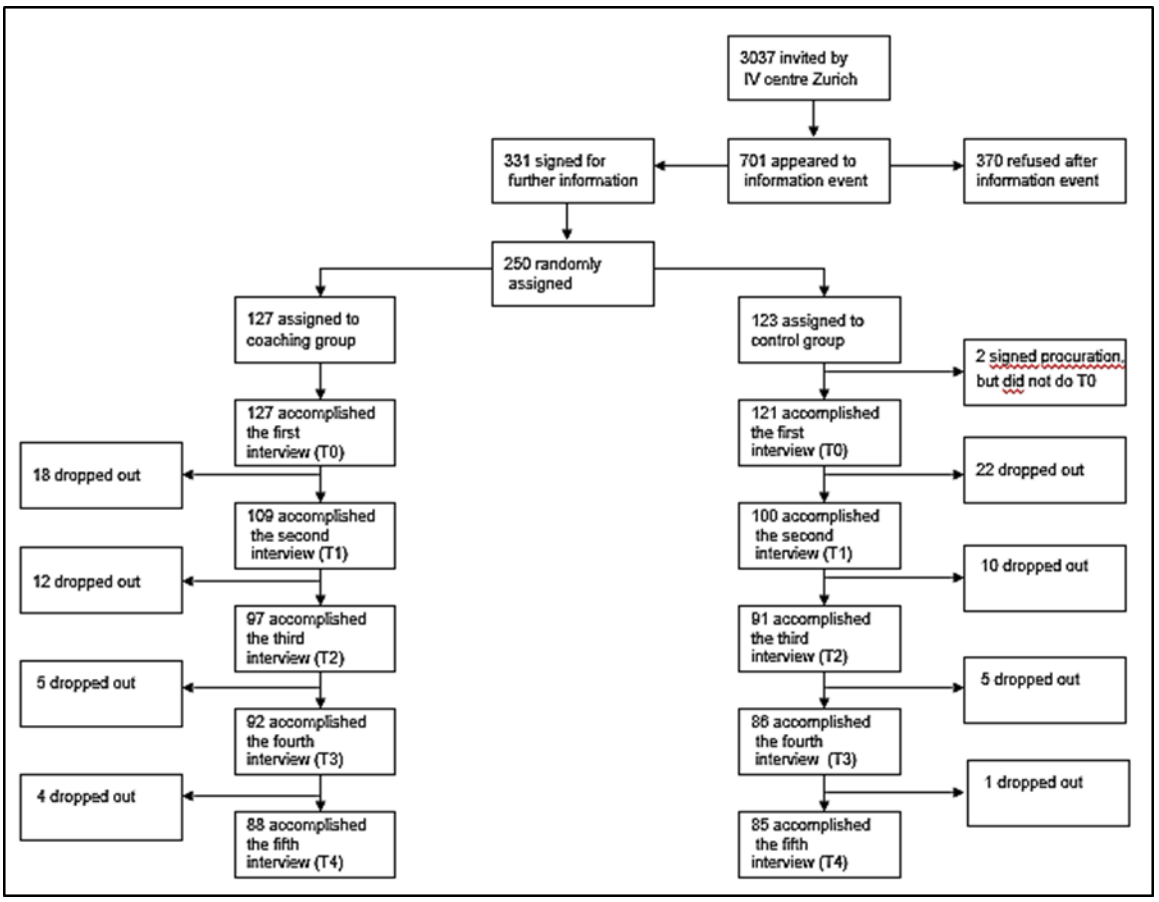
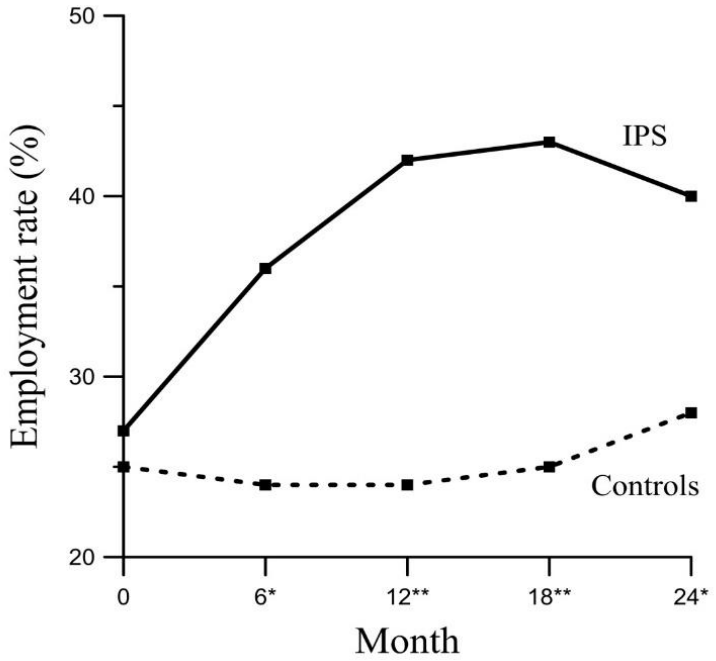


Figure 2. Employment rates of competitive employment for IPS and control group throughout the whole two year period (LOCF) including jobs that had been held already at the beginning of the study.



Note. Chi-Quadrat-test; *p < 0.05; **p < 0.01. The total numbers of jobs during each time of measurement.

4.4 Study 2

Does "Individual Placement and Support" satisfy the users` needs?

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Abstract

This study aims to investigate clients' satisfaction with Individual Placement and Support (IPS) at the University Hospital for Psychiatry Zurich (PUK). Furthermore this study aims to investigate if clients feel the approach of IPS as a useful approach to fulfill their needs. 125 people were recruited from one of the three IPS services of PUK and were asked to complete a structured questionnaire. The following IPS services were available: i) randomized controlled trial ZHEPP (www.zhepp.ch), ii) randomized controlled trial ZInEP (www.zinep.ch) and iii) us clinical SE service of PUK (IPS-PUK).

The clients mostly indicated that the IPS was generally useful and fitted their needs. Overall satisfaction of the participants with the IPS services of PUK was very high. Furthermore, this study confirms that client satisfaction and symptom severity are associated.

In conclusion, participants of the IPS services received the support they were looking for. This means that the approach of IPS fits the needs of different patient groups and can be used without any modifications. The most important limitation is the unequal group sizes. Therefore, the obtained results need to be strengthen by future research.

Keywords: Supported Employment, Individual Placement and Support, satisfaction, rehabilitation, mental illness.

Introduction

In the last 20 years, research on vocational rehabilitation revealed that supported employment (SE) according to the principle “first place, then train”, produces better competitive employment outcomes compared to classical vocational rehabilitation based on the “first train, then place” approach (Bond, 2004). In addition, earlier studies demonstrated that SE leads to better quality of life, less psychopathology and lower drop-out rates (Drake et al., 1996).

In 1993, Becker and Drake (1993) defined the Individual Placement and Support (IPS) model, a variant of SE that is based on eight principles: a) placement in competitive employment market, b) focus on client preferences, c) individualized support, d) close cooperation with the care system, e) openness to anyone who wants to work in the competitive employment market, f) rapid job search, g) job development and h) network of potential employers built up by the job coaches. Additionally, the clients are free to choose the number of appointments with their job coach.

Until now, almost all studies on IPS focused primarily on the question if IPS produces better employment outcomes than traditional vocational rehabilitation (TVR) or sheltered workplaces in general. Next to that, research focused on the quality of life and the psychopathology of clients using IPS and TVR, while little research has been done on clients’ satisfaction. It has been shown that satisfaction with IPS services is linked to better employment outcome and leads to higher motivation among the clients (Bond et al., 2001c). However, since research regarding patient satisfaction with treatments in general is scarce (Shipley, Hilborn, Hansell, Tyrer, & Tyrer, 2000) further studies are needed. The research should consider the question whether IPS fits different needs of different groups (i.e. persons with mental illnesses who are unemployed and want to work in the competitive employment market or employees with mental illnesses who have problems with their current job situation).

The services of the University Hospital of Psychiatry Zurich (PUK) include Supported Employment which was used as a reference service. Moreover, PUK participated in an international randomized controlled trial (RCT) called Enhancing the Quality of Life and Independence of Persons Disabled by Severe Mental Illness through Supported Employment Life (EQOLISE) (Burns et al., 2007), which focused mainly on the effect of IPS on people with mental disorders concerning various aspects such as salary, job tenure and quality of life.

The study presented here investigates the satisfaction of the IPS services users (IPS-PUK) and of the participants of two randomized controlled trial (RCT) conducted at PUK: supported employment

trial of the Zurich Program for Sustainable Development of Mental health services (ZInEP) and the Zurich Reintegration-Pilot-Project (ZhEPP).

This article aims to clarify the following questions:

1) Do IPS services satisfy users` needs?

2) How is the satisfaction with the clinical IPS services in general?

3) Is there an association of satisfaction with psychopatholgy?

Material and Methods

Design/Setting

The data were collected using a structured questionnaire developed specially for the purpose of the study. The participants of the study were recruited from one of three different IPS services available at PUK. If a client refused to participate in the study no record was made. Before participants answered the questionnaire, they were informed about purpose and procedure of the study. Afterwards, they were asked to sign an informed consent. Participation was voluntary and anonymous. The questionnaire was handed out by the job coaches and completed at the beginning of the coaching session requiring about 10 to 15 minutes. The participants received no remuneration.

Participants

The participants were recruited from three different IPS services available at PUK: i) RCT ZHEPP (www.zhepp.ch) (Viering et al., 2013) RCT ZInEP (www.zinep.ch) (Nordt et al., 2012) and clinical SE service of PUK (IPS-PUK). In total, 125 individuals participated (ZhePP= 53, SE= 59; ZinEP= 13). The sample consisted of 55 (44%) males and 70 (56%) females, with a mean age of 43.22 years (SD =10.78). The three groups did not differ significantly regarding age and gender of the participants.

Inclusion criteria for the current study were: a 18 years of age or older, a diagnosed mental disorder and participant's goal to work in competitive employment market. Furthermore, participants had to be engaged in one of the IPS services of PUK at the time of study. Exclusion criteria were: severe organic disorder (ICD-10: F0) or mental retardation (ICD-10: F7). Nevertheless, the participants' characteristics differed slightly between the groups. ZHEPP participants were recruited with support from IV-office Zurich. Both employed and unemployed individuals were allowed to participate. However, most of the participants included in this study were unemployed. ZInEP were recruited

from six outpatient clinics in the Canton of Zurich. Individuals included in the study had to be unemployed for at least three months. Users of the clinical SE service of PUK (IPS-PUK) enrolled themselves in the program. Most participants in this group enrolled because they still had a job but needed help in daily work. At the beginning of data collection all participants were engaged in one of the three IPS services. However, some participants were in one group (e.g. IPS-PUK) at the beginning of the study and changed to another one (e.g. ZhEPP) later. The current employment status of the participants is not known. However, different group characteristics allowed to assume the employment status based on the group membership. All groups received similar IPS services and all services were located at PUK.

Measures

Client satisfaction with IPS was evaluated using a questionnaire based on the ZüPaZ ("Zürcher Fragebogen zur Patientenzufriedenheit"; i.e. Zurich questionnaire of patients' satisfaction) (Modestin et al., 2003) and the ZUF-8 ("Zufriedenheitsfragebogen"; i.e. Satisfaction questionnaire) (Schmidt et al., 1989). We chose eight items from the ZüPaZ and modified them. Those modifications included wording adaptation to fit the supported employment terminology (e.g. "Job Coaches" instead of "doctors"; "Coaching goals" instead of "Treatment goals"). The entire ZUF-8 was included without any modifications. Both scales include items rated on Likert scale. The score ranged from 1 to 4 with higher values indicating higher satisfaction. Based on these two questionnaires, the overall satisfaction score of the sample was conducted. Additionally a modified version of the "Lebensführungssystem" (Life leading system) (Sommerfeld et al., 2011) was included. The main goal of this questionnaire was to acquire knowledge, about the individual usefulness of IPS for each client. The questions included 11 dichotomous items, some of them not directly related to IPS (e.g. to deal with addictive drugs). These items were chosen to discriminate between IPS and other tasks. The clients were asked to select the three items from which they profit the most.

The symptomatology of the clients over the past four weeks was assessed with the German version of the Symptom Check List SCL-10 (Franke, 1995), a short version of the SCL-90. Questions regarded symptoms of interpersonal sensitivity, depression, anxiety, phobic anxiety, and psychoticism. The scale ranged from 0 ("no suffer") to 4 ("suffered very strong").

Statistics

Statistical analysis was conducted using SPSS 20.0. Descriptive analysis regarding sex, age, group membership and duration of participation in one of the IPS services was computed.

To test for normal distribution of continuous variables the Kolmogorov-Smirnov-Test was used. As the variables were not normally distributed, Kruskal-Wallis-Test was performed to test for group differences of the continuous variables. Crosstabs were implemented in order to investigate whether the categorical variables, in particular variables from Life leading system, differed between the groups.

Descriptive analysis was conducted regarding the overall satisfaction level with the IPS offer and the overall symptomatology of the clients. Spearmen correlations were performed between satisfaction measures and symptomatology.

Results

The mean participation duration in any of the SE services was M= 1.82 (SD= 1.23) years. Participants from ZInEP took part the longest (M= 2.38, SD= 0.87), followed by IPS-PUK (M= 1.92, SD= 1.49) and ZhEPP (M= 1.58, SD= 0.89).

The results for the Life Leading System-questionnaire are depicted in Table 1. A significant association between group membership and the subjective importance of the item “finding a job” was found. Most subjects who rated this item as important were participants of ZInEP. However, ZhEPP and IPS-PUK also rated this item as important. Further group differences regarding the item “IPS gave me good support while I was working” were found. While the majority of the IPS-PUK sample considered this item as important, only about the half of the ZhEPP sample and just few of the ZInEP subjects considered the support by IPS important for daily work. Group differences were also found regarding the items “IPS helps me to deal with my boss”, “IPS helps me to deal with spare time” and “IPS helps me to gain more self-esteem”.

The Kolmogorov-Smirnov test showed that symptomatology (D (125) = 0.90, p= 0.014) and satisfaction (D (125) = 0.15, $p < 0.001$) were not normally distributed. Overall symptomatology of the whole sample was low (M=1.18, min= 0.00, max= 3.78, SD=.77). Group comparison indicated that there was no significant difference in overall symptomatology between groups (H (2) = 4.70, p = 0.095, IPS-PUK= 57.89, ZhEPP M= 71.04, ZInEP M= 53.42). Overall satisfaction with the IPS offer was high (M=3.57, min= 1.57, max= 4.00, SD=0.35). Furthermore, there were no significant differences in overall satisfaction between the groups (H (2) = 0.11, p =0.95, IPS-PUK M= 63.69, ZhEPP M= 62.98,

ZInEP M= 59.96). Higher satisfaction with IPS services was associated with lower symptomatology (r= -.278, p = 0.002).

Discussion

Our study sample includes one group with most participants already having a job (IPS-PUK) and two groups in which most persons were looking for a job (ZInEP; ZhEPP). IPS-PUK participants rated the items of the Life leading system that are associated with daily work as more important than the ZhEPP and ZInEP participants. ZInEP participants scored the item "IPS supports me to find a job" especially high. This answers our first research question, if IPS services satisfy the users` needs. Participants of IPS services, who were mostly seeking a job (ZInEP), got what they were looking for, as did those participants who needed support in their daily work (IPS-PUK). Hence, the approach of IPS demonstrates its flexibility to fulfil the needs of two different groups. This study shows that there is no difference concerning satisfaction between the groups, as all participants were highly satisfied with IPS. Although in most satisfaction studies in health care system individuals are generally highly satisfied (Haahr et al., 2012), our study showed, that it is important to consider in detail, what makes people satisfied with vocational rehabilitation services (Ball, Oursler, Green, & Codeiro, 2005). These details should be investigated more thoroughly in the future.

As satisfaction correlates with motivation (Catty et al., 2011) and motivation correlates with coaching success (Medalia & Saperstein, 2011), the knowledge of clients` satisfaction is important. This knowledge will help to fill possible gaps in the IPS services.

This study showed that participants with fewer psychiatric symptoms were more satisfied with IPS. However, the symptomatology of the entire sample was low. Therefore, an interesting question arises: does IPS lead to fewer psychiatric symptoms or do IPS participants show fewer psychiatric symptoms to begin with? Further research should undoubtedly address this issue. Becker et al. (1998) found poor coping with symptoms as an influential factor for job satisfaction. Therefore, we expect the symptomatology to have a substantial influence on satisfaction with IPS. Indeed, this association was observed in the present study. Participants with fewer symptoms were more satisfied with the IPS offer.

Nevertheless, limitations of this study should be considered. First, most participants in the IPS-PUK group had a job, whereas most participants in ZInEP and ZhEPP were looking for a job. Therefore, the group differences probably would be higher if the groups had clear inclusion criteria regarding the job status.

Moreover, a limitation is the unequal distributions of the groups. The total sample size is sufficiently large, but the groups have unequal sizes, i.e. ZInEP contains 13 participants and ZhEPP and SE more than 50 participants each.

Previous studies show, that the characteristics of the job coaches are very important to the success of job coaching (Glover & Frounfelker, 2013). Some items of Life leading system contained satisfaction with the treatment by the job coach. In our study the satisfaction was linked to the treatment by the job coach. Some job coaches supervised participants several groups (e.g. ZhEPP and IPS-PUK). This could influence the results of group differences in satisfaction.

Furthermore, the satisfaction results might have been influenced by the job coaches handing out the questionnaire and being present while clients answered the questions.

Table 1.

Group differences in individual usefulness of IPS

IPS supports me…	IPS-PUK rated item as import-ant	ZhEPP rated item as import-ant	ZInEP rated item as import-ant	p	χ^2	df
..to find a job	47 %	48 %	84%	0.039*	6.49	2
..while I was working	70 %	36 %	15 %	< 0.001*	19.75	2
..to deal with my col-leagues	23 %	9%	23%	1.472	3.84	2
.. to deal with my boss	39 %	25 %	0 %	0.015*	8.45	2
…to deal with my social life	14 %	26 %	23 %	0.264	2.667	2
..to deal with my doctor and carer	32 %	21 %	15 %	0.294	2.45	2
.. to deal with my spare time	4 %	21 %	0 %	0.006*	10.36	2
..to organize my daily structure	12 %	25 %	23 %	0.235	2.89	2
..to gain more self-esteem	37 %	60 %	69 %	0.017*	8.15	2
..to build more capaci-ties	23 %	32 %	31 %	0.535	1.251	2
..to deal with addictive drugs	0%	0%	0%	-	-	-

Note: *p > 0.05; IPS: Individual Placement and Support, IPS-PUK: IPS-Standard offer of PUK, ZhEPP: Zurcher Reintegration Pilot Project, ZInEP: Zurich program for Sustainable Development of Mental Health services; Data based on the “life-leading system”

5 General Discussion

The presented studies aimed to give a broader understanding of the effectiveness of the IPS approach in Switzerland. As the study protocol and the systematic review contain no clinical trials, the main focus of the next subchapters is on study 1 and 2.

5.1 Synopsis of study 1 and 2

The main objective in study 1 was to assess how the job situation of disability pensioners in Switzerland participating in the ZhEPP study evolved with the support of IPS. In addition, the focus was on examining if the results of former studies that found higher number of hours worked and longer job tenure for IPS users compared to participants who did not get any SE services (Burns et al., 2007; Twamley et al., 2009) can be confirmed.

Indeed, the results of this study showed that IPS users (32%) are more effectively reintegrated into the competitive employment market in Switzerland compared to participants of the control group (12%) who received no specific vocational support. In detail, after the first six months of participating in the ZhEPP-trial, IPS users obtained significant more jobs in the competitive employment market than participants of the control group. This difference remains significant over the whole study period. Furthermore, it was shown that at baseline, unemployed IPS users had more success of finding and keeping a job during the study period compared to the equivalent group of people without vocational support. Also, significantly more people from the control group never had work in the competitive employment market compared to the IPS users. These results reveal that disability pensioners suffering from mental illness who were supported by IPS had higher chances to obtain work in the competitive employment market compared to those in the control group. However, the study could not confirm that disability pensioners supported by IPS and working in the competitive employment market had more working hours and a longer job tenure than those of the control group. One possibility is that pensioners receiving IPS support deliberately start with a lower workload and only increase it with caution according to their wellbeing, in comparison to individuals with mental illness that have no financial security through a disability pension and are therefore much more dependent on their salaries.

Until now, research regarding the approach of SE focused mostly on vocational outcome, but there is a lack of evidence if the IPS approach fits the needs of the disability pensioners and if they are satisfied with what IPS offers. Study 2 addressed this issue and included participants from two RCTs at the PUK (ZhEPP and ZInEP) and participants from the standard SE service of the PUK. The results showed

that in general all participants were highly satisfied with the IPS service, independent of the group they were part of. Moreover, the different needs of the individual groups could be satisfied with the approach of IPS. In detail, participants attending the groups ZhEPP and ZInEP, where most persons were seeking a job, stated that they felt highly satisfied with the provided support by the job coaches. On the other hand, IPS also fits the needs of people who already have a job (IPS-PUK) in the competitive employment market, but need support in everyday work. Furthermore, the study showed that people suffering less from symptoms were more satisfied with the IPS offer.

Apart from these two core studies, the systematic review showed on the one hand that the success of SE can be enhanced if particular predictors are considered (e.g. high fidelity), but also that there still exist heterogeneous results regarding some predictors (e.g. age, diagnose).

5.2 Advantages and limitations

The main advantage of the study 1 is the RCT approach. Based on this fact, the gold standard of clinical trials was reached, and the selection bias could be minimized. One of the main advantages of the presented research was the implementation of the study into the "real world". The study was initiated because of an existing lack of support for reintegration of disability pensioners suffering from mental illness in Switzerland. Although the number of disability pensions due to mental illness remained constant between 2010 and 2013 in contrast to other disability pensions that decreased during this time period, government-financed vocational support for reintegration into the competitive employment market remained practically non-existent (SVS, 2014). This study, however, emerged from a close cooperation between the public authorities (BSV and IV-institution Zurich) and the research institute PUK. The conducted research, that included participants of a real applicant setting, is of high interest for the BSV (see unpublished Abschlussbericht by Kawohl et al., 2015) and also promoted the interest of the IV-institution, especially regarding the IPS approach. Hence, this study did not only contribute to the understanding of the effectiveness of SE and IPS in general, but might also have an impact on the governmental reintegration approach of disability pensioners in Switzerland and on the social insurance laws.

Another advantage of study 1 is that it gives evidence to the assumption that it is an explicit desire of disability pensioners suffering from mental illness to work in the competitive employment market. The high motivation of the pensioners to participate in the study led to a moderate number of drop outs and resulted into a high number of participants (250 persons). Originally, the study was split into two recruitment phases due to the insecurity whether people with mental illness, whose pension got

approved recently, were mentally prepared to participate in a study with the goal to reintegrate them into the competitive employment market. However, the 40 participants of the first phase could be acquired very easily so that the second phase could be started subsequently.

Another positive aspect of the study is that it forms a good basis to understand the clients` view regarding the IPS approach. It became clear, that the individualized procedure, forming the base of IPS, is flexible to the needs of different groups and is highly appreciated by the clients. This client-oriented individual support is crucial as a service in general is only working well if the customers receive what they are expecting. To our knowledge, this is the first time the flexibility of IPS was investigated.

One of the limitations of study 1 concerns the fidelity of IPS that demonstrated to be crucial for better vocational outcomes in our systematic review. The IPS fidelity of the ZhEPP study is only moderate during the whole study period as some items (e.g. “cooperation with other institutions” and “other care team individuals and community-orientated services”) of the IPS fidelity scale were impossible to fulfill owing to the study setting. Another disadvantage of the study is related to the survey of the job status. Whereas the job status of the IPS users was assessed every time they started a new competitive employment, the job status of the participants of the control group was recorded solely every six month. Consequently, there is a possible bias of the collected data as some short job tenures by the control group were possibly not recorded.

Limitations of study 2 are the small sample size of 125 participants that was distributed unequally. With the fact, that one group contains only 13 participants (ZInEP) compared to 59 of IPS-PUK and 53 of the ZhEPP participants, the question arises, if the results of study 2 can be representative of the whole population. Moreover, the groups were not assigned clearly. Most persons in ZhEPP and ZInEP were seeking a job, but there was no inclusion criterion in ZhEPP that stated that solely unemployed people with mental illness may be recruited. Hence, there is no clear cut regarding occupational status between the groups and therefore, the generalizability of the results is questionable.

5.3 Practical implication

The presented studies help to give a broader understanding of the effectiveness of IPS in Switzerland where SE produces high interest. They can provide a basis for the decision if IPS should be implemented as a standard service in European, and more specific, in the Swiss health care systems. Our research results demonstrated the effectiveness of IPS for disability pensioners due to a mental ill-

ness. But more importantly, study 1 showed that disability pensioners in Switzerland can profit from IPS services, especially at an early stage. This indicates that the pensioners should get support by the governmental institutions very promtly after the pension approval in order to minimize the risk of chronification or social isolation. And even more important, Nordt et al. (2015) showed in a recent global study that the relative risk of suicide increased by about 20-30% when people became unemployed. Although Nordt et al. (2015) based his results on data regarding the economic downturns, and excluded China and India (Webb & Kapur, 2015), they could show that work in the competitive employment market is important to the majority of the society. This also highlights the importance of protecting people against long-term unemployment. This evidence in combination with our results, and the fact that the presented study is based on the IPS approach that includes rapid job search and focus on competitive employment, suggests that the BSV should consider to implement SE as a standard service. To offer IPS does not involve considerable expense. In detail, there is no need for specific materials or a specific setting. The environment where IPS can be offered is very similar to all other vocational rehabilitation settings.

Furthermore, our results showed that social disability pensioners prefer to work in the competitive employment market. This evidence should help to weaken the fears of health care professionals who are at times concerned that the competitive employment market is too stressful for people with mental illness (Krupa, 2004). Moreover, the results showed that people with mental illness are highly satisfied with the SE services, regardless of their job status. Therefore, IPS services can support two different needs with one offer compared to PVR where the focus lies solely on reintegrating unemployed people with mental illness. This flexibility could be helpful to the SVA as until now, there is no standard offer for disability pensioners who need support in everyday work.

5.4 Future research

The IPS approach is a very topical subject within work rehabilitation and is considered as highly effective in reintegrating people with mental illness. Nevertheless, SE is still not well implemented in Europe and more research is required to assess their advantages and limitations. One reason why the implementation of SE to the Swiss health care system stagnates might be the poor evidence of the cost-effectivity of the IPS approach. Solely, Knapp et al. (2013) showed that IPS is more cost-effective in Switzerland compared to PVR. Clearly, more effort needs to be done to increase the knowledge about costs of rehabilitation services. Next to that, Jäger et al. (2013) showed in a catamnestic study that the sustainability of the effect of SE is questionable if the coaching is not followed along. Hence, future research should investigate if the participants of SE, who obtained a job in the competitive

employment market, can profit from the effectiveness of IPS after the coaching finished. As the assumption that individuals with mental illness supported by IPS worked more hours and had higher job tenure compared to the control group could not be verified due to reasons that remain elusive, this issue should be investigated in future research with special focus on the social security system of Switzerland.

Furthermore, the systematic review demonstrated that the characteristics of job coaches have a high impact on the success of SE. As this topic remains weakly investigated, despite its important role in motivating and supporting the clients, this should be part of future research. Moreover, the review also demonstrates that there are contrary results of particular predictors (e.g. age, diagnose), a fact that hampers the determination of specific predictors that enhance the success of SE.

Last, although study 2 forms a good basis to understand the clients view, the study is too small to draw clear conclusions. This asks for more research on the clients' satisfaction regarding IPS, but also on the usefulness of the individual principles of IPS.

6 Conclusion

Supported employment is not well implemented in Europe although it is considered as highly effective in reintegrating people with mental illness. This thesis was initiated to give a broader understanding of the effectiveness of IPS in Switzerland and to help to provide a basis for the decision if IPS should be implemented as a standard service in the Swiss health care system. Study 1 showed that IPS leads to higher reintegration of disability pensioners with mental illness back into the competitive employment market compared to disability pensioners who receive no specific support. The reintegration of people shortly after their pension approval proved to be a good idea considering their satisfaction with the SE service. The reintegration at an early stage should prevent social isolation, but also the known negative effects of long-term unemployment. Furthermore, the results showed that social disability pensioners in Switzerland were interested in being reintegrated back into the competitive employment market. The fact that SE is effective in Switzerland, a country with a particularly low unemployment rate, strengthens the value of the IPS support even more. However, the assumption that IPS leads to higher income and more hours worked could not be verified. Study 2 was conducted to gain a better understanding of the clients` view related to the approach of IPS. The results showed that that social disability pensioners prefer to work in the competitive employment market and that they were satisfied with what IPS provided, regardless of their job status. In conclusion the

results of both studies showed that IPS is a good alternative to PVR for the Swiss health care system and should be taken into consideration as a standard service in work rehabilitation in Switzerland.

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Curriculum Vitae

Personal Information

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Employments

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01/2015 – current	Psychologist at the Medical Office Dr. med. Abele, Lucerne, Switzerland
03/2014 – 12/2014	Psychologist at Outpatient Clinic of the University of Zurich, Zurich, Switzerland
12/2011 – 04/2015	Research Assistant at the Psychiatric University Hospital Zurich (PUK), Zurich, Switzerland

Education

04/2013 – current	Postgraduated Training for Psychotherapy (MAS), Klaus-Grawe-Institute, Zurich, Switzerland
05/2012 – 09/2015	PhD studies in clinical Psychology, University of Zurich, Switzerland
09/2009 – 10/2011	Master of Science in clinical Psychology, University of Berne, Switzerland
01/2009 –06/2009	Exchange Semester at Ubaya University, Indonesia
09/2005 – 06/2009	Bachelor of Science in Psychology, University of Maastricht, Netherlands

Journal Publications

Viering S, Bärtsch B, Obermann C, Rüsch N, Rössler W, Kawohl W. Integration of individuals receiving social benefits: possible advantages of Individual Placement and Support (IPS) – Study Protocol. *BMC Psychiatry* 2013; **13:** 189-195

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Poster presentation

Deutsche Gesellschaft für Psychiatrie und Psychotherapie, Psychosomatik und Nervenheilkunde (DGPPN), Berlin (2014). Bedürfnisorientierung im Beruflichen Eingliederungsmodell- Individual Placement and Support. **Viering S,** Jäger M, Bühler F, Bärtsch B, Leimer H, Nordt C, Rössler W, Sommerfeld P, Kawohl W